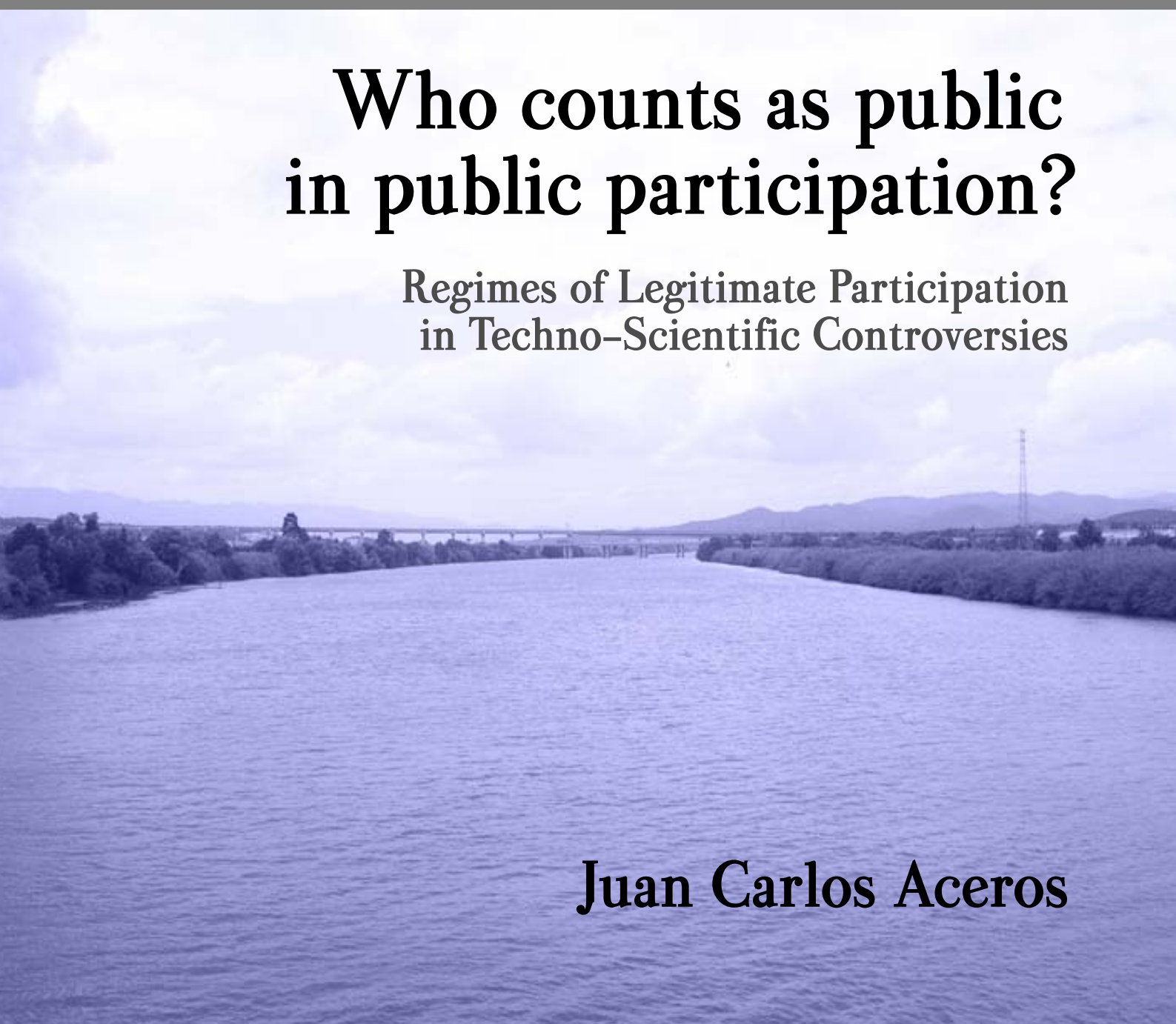




Who counts as public in public participation?

Regimes of Legitimate Participation
in Techno-Scientific Controversies



Juan Carlos Aceros

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Chapter 1

Introduction

Democratic inventories

To start with, controversies help to reveal events that were initially isolated and difficult to see, because they bring forward groups that consider themselves involved by the overflows that they help to identify. As investigations go on, links from cause to effect are brought to the fore. **The controversy carries out an inventory of the situation that aims less at establishing the truth of the facts than at making the situation intelligible. This inventory focuses first on the groups concerned, on their interests and identities.** It is not the result of a cold, distant, and abstract analysis. It is carried out at the same time as the actors arrive on the scene. The distribution is not known in advance but is revealed as the controversy develops, and it is precisely for this reason that the latter is an apparatus of exploration that makes possible the discovery of what and who make up society.

*Callon, Lascoume and Barthes (2009)
Acting in an uncertain world*

1.1. Placing democracy in quotation marks

Democracy, by whatever definition, is highly valued today. Can someone speak critically about it and not be considered a radical extremist or a nostalgic fascist? It is, indeed, a difficult accomplishment therefore to make not only a criticism but to offer an alternative to the current democratic order. If something is possible (or politically correct) to do with democracy it is only to enrich it, making it more 'direct', 'participatory', 'deliberative' (Habermas, 1984; Jasanoff, 2003), 'dialogic' (Callon, Lascoumes, & Barthe, 2009), and finally, more 'democratic' (Graña, 2005).

Because there are different historical and local forms of 'democracy' in theory and practice, a number of procedures and experiences of the 'democratisation of democracy' also exist. In Spain - where the support of the democratic system has been traditionally widespread (Montero et al., 1997) - a collective claim in favour of an enriched democracy has emerged recently. The national mass-media called it the '15-M movement'. Inspired by the 'Arab Spring', The Washington Post (May 19th, 2011) called it the 'Spanish Revolution'. Nowadays the latter can hardly be viewed as a radical transformation of the established social and political system. Strictly speaking, it is not a 'revolution' at all. However, as some observers have suggested (Casquette, 2011), one cannot argue that the 15-M movement has achieved nothing.

The social mobilization Spanish society has experienced since the spring of 2011, *inter alia*, has put democracy in quotation marks. The slogans that were heard in the streets and squares - in particular, '*lo llaman democracia y no lo es*' [they call it democracy, but it is not] or '*no nos representan*' [they don't represent us], - the name of influential mobilisation organisations such as '*Democracia Real Ya*' [Real Democracy

Now], and the organisational strategies deployed during the mobilisations, have questioned the very meaning and the current practice of democratic representation.

This recent questioning of democracy, however, cannot be regarded as the unique achievement of the 15-M movement, nor a sudden social innovation. By contrast, it has been part of the Spanish alternative political culture for several years. It is particularly clear in the case of the urban left-wing libertarian movements; nonetheless, it can also be found in other mobilisation sectors. For example, it is noticeable in some of the groups who have been involved in disputes on water in the late twentieth century and the early twenty-first century, which lead me directly to the context that I wish to deal with, and where this PhD dissertation examines the legitimisation of public participation in techno-scientific issues.

In December 2000, shortly after the opposition against the draft of the National Hydrological Plan (NHP) and the Ebro transfer was (re)activated, a member of the *Plataforma en Defensa de la Ribera d'Ebre* [Platform in Defence of the Ebro Bank, one of the organisations involved in the movement against the NHP] spoke about the grassroots reaction in southern Catalonia in these terms: 'We are non-partisan, but not apolitical either, because we want to influence decision-making'. And using the words that the mass-media attribute today to the 15-M movement, he added: 'the creation of platforms [like ours] demonstrates a lack of understanding between citizens and political parties which we feel don't represent us' (La Vanguardia, December 9th 2000:4). Some days after, Manuel Tomás, a well-known spokesman of the *Plataforma en Defensa de l'Ebre* [Platform in Defense of Ebro], defended his organisation against the *Convergència Democràtica de Catalunya's* [Democratic Convergence of Catalonia, a centre-right liberal party] attacks saying: 'We are democrats and this is why we protest,

exercising our right to reject the worst thing that can happen to this region, which is a transfer' (La Vanguardia, December 17th 2000:40).

The grassroots organisations that position themselves against the NHP's draft and the Ebro transfer regard themselves as full members of the democratic political arena. However, their relevance or adequacy in that arena is not a given. It supposes a challenge to the current order of political representation. This is so because in Spain people consider that 'politics' is what politicians and parties do (Jiménez Sánchez, 2005). If other players proclaim themselves political actors then further clarifications are needed. That is why the *Plataforma en Defensa de la Ribera d'Ebre* and the *Plataforma en Defensa de l'Ebre* have to make their identity noticeable and acceptable in a political way. In that sense, they say that they are 'democrats' but 'non-partisans' and defend that they are proposing water policy, although not through the established representation channels. Thus, they assume a powerful yet compromised position, acting as 'self-authorized representatives' (Urbinati & Warren, 2008), that is, as non (democratically) elected players making representative claims on behalf of specific interests, goods and values. In the same way, their legitimacy is precarious, and their political quality is often devalued, as the next quote – extracted from the weekly booklet *Vivir en Tarragona* (La Vanguardia, December 6th, 2000:2) – illustrates:

'The Catalan institutional vacuum in this battle [regarding the NHP] has been vociferous and, unfortunately, it will have consequences. Thus, there have been some hurtful situations, as is the case of prime time radio programs in which the voice of Aragon was its president, while the voice of Catalonia was the spokesman for the Plataforma en Defensa de l'Ebre! Even considering all the affection for this platform, the gap is offensive. That means that Catalonia has

no institution? Where are our democratically elected representatives?' (Rosales, 2000).

Turning to the topic I want to address in this dissertation, a number of questions arise in respect to the quoted statement. Why is the emergence and action of these self-authorized representatives considered 'unfortunate', 'hurtful' and 'offensive'? Why, on the other hand, are the 'democratically elected representatives' considered to be lacking? Why is a 'Catalan institutional vacuum' diagnosed? And what kind of (let's say, negative) 'consequences' are to be expected because of this? These unresolved questions are all about what we consider the appropriate democratic way to articulate issues of concern and the legitimate players who can participate in it. This dissertation examines how the legitimacy of political actors emerges and operates in discourses and practices turning around techno-scientific controversies. More concretely, it is focused on prototyping what I have called *Regimes of Legitimate Participation* (RLP).

1.2. Background and context

The given piece of research is mainly motivated by the interest that Science and Technology Studies (STS) have shown in public participation and its role in the 'democratisation of democracy' through the 'democratisation of science and technology'. It is heavily informed by the work of Callon et al. (2009) on public controversies, the performative approach of Latour (Latour, 2005; Strum and Latour, 1987) and Stenger's 'Cosmopolitical Proposal' (Stengers, 2005). Yet, the present dissertation also draws on other sources. Thus, the analytical tool that I propose as appropriate for the exploration of the public participation primarily works out of the

sociology of Boltanski and Thévenot (1991, 1999)¹. The dissertation also retrieves theoretical and methodological insights from Discursive Social Psychology - particularly its approach to identity (Antaki & Widdicombe, 1998; Dixon & Durrheim, 2000; Taylor, 2003) - and Internet Studies - concretely the analysis of hyperlinks networks (Rogers & Marres, 2000; Rogers, 2002, 2004). In order to clarify how the attempt is made in the given piece of research to connect the above mentioned authors and traditions, I will make explicit the background of my dissertation, its aims and its research question.

The approach to the RLP proposed here forms part of the reflections and pieces of work developed during the R+D+i Project 'Science, Technology and Citizenship in Knowledge Societies', carried out in Catalonia (Spain) between 2005 and 2008². The main goal of this project was to identify and describe a particular trait of 'Knowledge Societies' which is the transformation of public controversies into techno-scientific controversies, and vice versa.

Given the growing complexity of many issues of public concern discussed in the political arena, such as Genetically Modified Organisms, Bovine Spongiform Encephalopathy, asbestosis or nuclear waste, the participation of a number of scientists and technologists in the processes of decision-making is also increasing (Fisher, 2009). The participation of these actors and the consequent transformation of the controversies into technical matters can remove the issues – at least temporarily –

1 Strictly speaking, these authors are not STS scholars, but Boltanski and Thévenot have had a remarkable influence on STS literature on care and biomedicine (Moreira & Palladino, 2005; Pols, 2004). Recently Guggenheim & Potthast (2012) have analysed the affinities between Actor Network Theory (ANT) and the Sociology of Critical Capacity.

2 The research project was funded by the Spanish Ministry of Education and Science (Ref. SEJ2005-09319-C03-01) and was coordinated by the *Grup d'Estudis Socials de la Ciència i la Tecnologia* (GESOCIT) of the *Universitat Autònoma de Barcelona*.

from the influence of public scrutiny (Callon et al., 2009), generating questions about the democratic legitimacy of the political decisions made (Graña, 2005).

Two reactions to such a situation can be traced. Firstly, the promotion of renovated consultative mechanisms and top-down participation experiences (e.g., consensus conferences, public hearings, area committees, neighbourhood forums, citizen panels, thematic groups, negotiated management and referendum) with which public bodies and independent organisations aim to re-democratise the techno-scientific controversies (see, Aibar, 2012; Goven, 2003; Lezaun & Soneryd, 2007; Rowe & Frewer, 2005). Secondly, the grass-root movements and other forms of 'uninvited' (Wynne, 2007) and 'spontaneous' (Bucchi & Neresini, 2008) forms of participation which operate as a bottom-up way to re-open the disputes, or delay its closure (see, Barry, 2001; Hess, Breyman, Campbell, & Martin, 2008; Latour, 2007). The R+D+i project mentioned above was focused on understanding how citizens perceive this set of phenomena.

In order to examine empirically their matters of interest, the research team selected a current and highly topical issue as a case study: water debates in Spain. Water issues significantly arise from techno-scientific aspects and advances, as well as the assessment of environmental and financial impacts that guarantee decision-making under rational criteria (Embid, 2002). Thus, until a few years ago, the definition of water policies in Spain had been predominantly based on (and supported by) experts' viewpoints (Mülberger, Vilaró, Tirado, & Domènech, 2007). At the same time, water issues are at the centre of increasingly important social interest since the human and environmental effects of large-scale water works, the necessity of innovative water

management, and the difficulties of access to water in different regions and countries have become salient issues.

Since the 1970s, environmental protest has been a key motor of water concerns in Spain (Bergua, 1999; Jiménez Sánchez, 2005). The opposition against a National Hydrological Plan – mandatory since the adoption of the 1985 Water Act – has been the most publicised water-related mobilisation in recent years (Mairal, 1993), and the one which succeeded in placing water issues on the national political agenda (Jiménez Sánchez, 2005). The NHP has been considered the last manifestation of the so-called 'hydraulic policy' (Pérez-Díaz, Mezo, & Álvarez-Miranda, 1996), a water policy focused on the promotion and construction of large water infrastructures as a way to solve water problems and to ensure the economic growth of the country (Arrojo, 2001a). Elaborated eight years after the 1985 Water Act, the NHP's first draft defined the situation of many Spanish reserves as deficient at critical levels. The deficit in 3.030 Hm³ quantified, together with a growing demand on resources, would be mitigated with 270 new dams, 9 water transfers, and other measures (Jiménez Sánchez, 2005).

Since the beginning, NHP was highly controversial. Some of the contested aspects of the text were the introduction of irrigation water pricing, the optimisation of consumption and the recycling of resources (Gil Olcina, 2003). Different actors denounced its harmful effects on the developmental potential of different regions of Spain (Boné, 2003), its economic unsustainability (Albiac et al., 2003), its lack of scientific support (Arrojo, 2001b) and its inattention to the latest technologies and forms of water management (Embid, 2003). Even more heated debates occurred around the Ebro transfer. The history of this water work proposal is long, and its onset can be dated to 1933, when it was formulated for the first time (Gil Olcina, 2001).

However, the R+D+i project focused on the last part of this history, which begins in September 2000 when a second NHP draft was proposed by the government of Jose María Aznar. This draft was released at least four years after the failure of the first water plan (which had never been approved). In the second draft, the transfer of 1.050 Hm³ per year of the Ebro River to the south-east of Spain and Barcelona were presented as the main action against the country's hydrological imbalances.

While the central government conceived the Ebro transfer as an essential measure to address deficit situations in the Levante, the south-east regions, and Barcelona, other players claimed that it was the outcome of decades of water mismanagement (Albiac et al., 2003; Arrojo, 2001a). In the south of Catalonia - where, at that time, other infrastructure projects were contested - the Ebro transfer was viewed as a territorial threat and a (new) attack against the natural environment and economic activities developed in the Ebro Delta (Pont, Herrera, Maxé, & Mena, 2002).

During the debates on the NHP, there was a constant appeal for the stimulation of a more inclusive public debate with a higher level of citizen participation (Aguilera Klink, 2003). Yet, public engagement occurred mainly in its 'un-invited' forms. The emergence of grassroots organisations was part of the social response to the Ebro transfer. Those groups contributed to the articulation of social concern on water management and water policy in Spain. While their claims were mainly territorial in nature (Pont et al., 2002), they also dealt with the technical and scientific issues of the Ebro transfer and denounced its environmental and economic consequences. At the same time, those organisations participated in the New Water Culture movement along with environmentalists, independent experts and academic organisations who together raised their own objections to the NHP (Tàbara & Ilham, 2008).

In order to study this case, the research team applied different strategies. The historical reconstruction of the water controversies in Spain was complemented with newspaper and Internet analyses. Focus groups with citizens from Catalonia and Valencia, interviews with key informants, and an ethnographic approach to the *Fundación Nueva Cultura del Agua* [New Water Culture Foundation, a central expert-based organisation engaged in the opposition to the NHP], were also carried out. The given dissertation presents two types of analysis: the first one is a qualitative exploration of data from eleven focus groups carried out in Catalonia; the second one is an innovative approach to web data called Issue Network Analysis. The methodological details related to both of these approaches are explained later. For the time being it is more important to clarify the objectives of the dissertation and its relation to specific aims of the R+D+i project.

1.2.1. Aims and research question

My involvement with the project 'Science, Technology and Citizenship in Knowledge Societies' has increased over recent years through my effort to carry out a deep data analysis, sometimes concentrated and systematic, sometimes occasional and sporadic. The three papers included in this PhD dissertation reflect the diversity of conditions in which I devoted myself to the writing process, as well as my goal in fulfilling the following objectives of the R+D+i project:

- Increasing knowledge about the public understanding of the water controversies,
- Getting to know the strategies that citizens deploy to participate in the public water disputes together with scientists and technologists, and
- Increasing understanding of the players, strategies and mechanisms involved in the control of publicly available information on the disputes.

The heterogeneous objectives of the R+D+i project involved the work of different researchers and, in my case, motivated the production of academic papers of various kinds. The chapters comprising the given dissertation are the most important pieces of research in which I had a central role. Two phenomena are particularly addressed in them: public participation, and the use of the Internet as a tool for publicising controversial issues. In order to show what I have discovered about the two phenomena, and to highlight a common concern that connects all three papers, I suggest reading them in a round, asking the following question:

How do ordinary people and social analysts identify and accept players with the right to take the part of the public in public participation?

This question aims to find out the ways those actors that are called upon to become involved in participatory processes are made noticeable and worthy by speakers and researchers. Therefore, the legitimation of the players involved in technological issues will become the object of study in this piece of research.

1.3. Theoretical framework

With the previously stated research question in mind, I propose an approach to the understanding and shaping of public participation which is loosely inspired by the Sociology of Critical Capacity (Boltanski & Thévenot, 1999, 2006). This perspective is interested in a particular form of practical reasoning based on normative principles which are invoked by people facing everyday situations of imbalance, opposition or dispute. During such 'critical situations' an established order or arrangement is undermined and the course of an ongoing action breaks down, the manifestation of disagreement and criticisms arise, creating uncertainty and anxiety, and making explanations imperative.

According to Boltanski and Thévenot, in order to develop operations of questioning and agreement-reaching, people directly involved in controversies mobilise collective, historically constructed, and culturally relevant modalities of identification and forms of evaluation, a.k.a 'regimes of justification'. Those context-dependent conventions remain tacit most of the time, but they are used communicatively in critical situations. They are deployed in the form of arguments, reasons, explanations, etc., operating according to 'principles of equivalence', that is, definitions of a generality or common ground which serve as a basis for the juxtaposition of different entities (whether they are human or not³) within a single discursive framework.

The principles of equivalence allow people to test problematic associations involved in a controversy and, eventually, to reach an agreement about their adequacy to the situation at hand. Thus, the principles of equivalence make it possible for the parties in a dispute to bring together a number of elements which are identified as similar according to a certain criterion in order to articulate criticisms and explanations. As a result, there emerges what Boltanski and Thévenot (1991, 1999) call 'common worlds'. These are orders of worth within which specific formats of relevant information, elementary relationships, material objects and forms of human qualification are placed together, prioritised and organised around the very principles of equivalence. The authors derive from their empirical analysis a total of six of such

3 Objects do matter in the work of Boltanski and Thévenot. As the authors say: 'In order to criticise and to explain to somebody else what is going wrong, one has to bring together different sets of people and objects and to make connections between them's (Boltanski & Thévenot, 1999:361). Thus, controversies involve both human persons as well as a large number of things. As is widely recognised, giving a crucial role to materiality is a distinctive feature of many STS approaches. It is especially present in studies inspired in the ANT (Irwin & Michael, 2003; Latour, 2004; Marres & Lezaun, 2012; Marres, 2007). However, in this dissertation I only focus on human entities. Material-semiotic approaches to social mobilisation and public policy can be consulted in Grau, Iñiguez and Subirats (2008) and Rodríguez, Tirado and Domènech (2001).

worlds: the world of fame, the inspired world, the domestic world, the world of the market, the industrial world and the civic world. In order to understand what exactly these worlds are I will take as an example the 'civic world'.

When someone uses the notion of 'collective interest' in order to justify or criticise people or situations, he/she is positioned in a 'civic world'. In accordance to this order of worth, it is expected that people (if they wish to act properly) transcend their particular and selfish interests, and orient themselves towards a shared will. The relevant form of social relation is 'solidarity': what really matters in the civic world is the constitution of a collective body. Thus, a truly 'civic' player doesn't act as an individual but rather as a representative of a larger social unit. This representativeness is controlled by formal rules. In light of those rules, everyone is equal. Here is what the civic principle of equivalence rests upon: all the citizens are equal in front of the law; they all have a right to elect others or be elected as the spokespeople for their collectives and social groups.

Water policies and projects can be justified according to a similar logic, presenting them as a matter of 'general interest', based on the 'solidarity' between Spanish regions, and falling exclusively within the power of 'our democratically elected representatives'. Of course, such an interpretation of the situation is not the only one, as the research on the NHP shows (see, Pérez-Díaz, Mezo, & Álvarez-Miranda, 1996; Tàbara, Costejà, & van Woerden, 2004). Yet, it is a recurrent and coherent way to organise the discourse about water-policy-as-usual in Spain. If someone aims to disturb that order by opening a controversy, a sort of civic world impurity must be denounced, or a change of regime must be demanded. In the first case, an NHP critic can unveil the hidden connections between the civic world and extraneous beings which prove

relevant in another worlds (for example, denouncing industrial interests in water policy). In the second case, the critic can evaluate the established entanglement by using an equivalence principle imported from another world (for instance, demanding alternative forms of representativeness based on relations of mutual recognition or public support, as in massive demonstrations).

As can be seen, the idea of a common world operates through the application of a single principle with the aim of achieving the understanding of entire entanglements, as well as developing explanations, justifications, agreements and criticisms of these. The regimes mobilised in order to do so are similar to what are considered, in social thought, as interpretive frames (Goffman, 1974) or, even better, discourses (Foucault, 1980, 1999). In STS literature, where the use of the expression 'common world' is frequent (see, Callon et al., 2009; Latour, 2004; Stengers, 2005) concepts similar to Boltansky and Thévenot's ideas can be found. The notions of 'mode of ordering' (Law, 1994), 'logic of care' and 'logic of choice' (Mol, 2008), 'regimes of truth' and 'regimes of hope' (Moreira & Palladino, 2005), 'micro-regimes of affective engagement' (Tirado & Domènech, 2011) can be regarded as quite close to Boltanski and Thévenot's approach. The RLP that I propose can be added to this glossary. Nevertheless, we shouldn't understand this as an application of Sociology of Critical Capacity to the study of public participation.

As I have already stated, my approach is inspired by Boltanski and Thévenot's approach. However, in this piece of research I am not interested in the justification, explanation, description or questioning of well articulated entanglements considered as a whole. On the one hand I do not draw on the notion of 'common world' but in that of 'regime of justification'. On the second hand, my use of the concept of 'regime' is

more specific in its scope. Regimes of justification not only require that principles of equivalence organise common worlds, but also *specific operations* through which such an ordering can be successfully achieved. In that sense, Boltanski and Thévenot mention the evaluation of worthiness, the prioritisation of relevant information, the identification of valuable relationships and human qualification. I am particularly interested in the first operation. Through the evaluation of worthiness, certain people are accounted for and produced as 'good' or 'bad', 'appropriate' or 'inappropriate' members of the entanglement under consideration.

The RLP draw on this kind of evaluation practice. These regimes are not about the justification of democracy or water policy as an entire system or world, but are rather about the 'rules governing participation' (Barnes, 2002). The RLP are mainly about the mobilisation of principles through which the members of a public constituted for the purposes of public engagement can be identified and judged⁴. Let me present the matter as follows: during a controversy, inventories of problems and solutions, but also of actors, are accomplished (Callon et al., 2009). The entities to be taken into account as part of the inventory of people and groups concerned are not invoked randomly. The disputing parties identify and select worthy members using single and simple legitimating principles. Thus, not everyone is eligible as a competent

4 The debates about the legitimacy of certain categories of participants can challenge the 'democratic' status of a given political order, raising questions about its legitimacy. But as I have already stated, it is extremely difficult to get rid of democracy as a valuable socio-political order. In light of this idea, Graña (2005) argues that we do not live in a 'crisis of democracy' today, but rather in a legitimisation crisis that affects traditional forms of representativeness and their well-known political players. This is consistent with the idea that political dissatisfaction is not necessarily related to a crisis of the legitimacy of democracy (Montero, Gunther, & Torcal, 1997). On the other hand, while the development of radical anti-democratic processes cannot be ruled out, it is not mentioned in the material at my disposal. The data reveals that legitimacy of 'democracy' is taken for granted by participants. To explore empirically this latter phenomenon indeed constitutes an interesting research challenge; but it is not the concern of this dissertation. Evidence and explanations of people's tendency to value existing social orders can be found in the Marxist-inspired social thought and in the psychology of legitimacy (Jost, Banaji, & Nosek, 2004; Jost & Banaji, 1994).

participant in the process of addressing and closing public techno-scientific debates. Only some of them are relevant candidates: those who fulfil certain conditions. Democratic representation or statistical representativeness can be regarded as the most frequently required conditions, but others can also be conceivable (Barnes, Newman, Knops & Sullivan, 2003). This dissertation examines such foundations of legitimacy.

1.3.1. Public participation and its legitimisation

The need for public participation in techno-scientific issues is increasingly recognised as being important by governments and other actors (Irwin & Michael, 2003; Leach, Scoones, & Wynne, 2005), and even turns out to be mandatory in certain cases⁵. Policy makers and social analysts justify the growing popularity of public participation with arguments of different kind (see, Stirling, 2006). For instance, it is argued that citizen involvement in decision-making and management is capable of overcoming the current 'democratic deficit' (Barnes, et al., 2003). It is also said that public participation reduces distrust in science and technology, legitimises institutions that control the debates and improves the quality of decisions (Drevenšek, 2005, Lezaun & Soneryd 2007).

Despite the widespread optimism on the role of public participation in the 'democratisation of science and technology', a number of unresolved issues and

5 The promotion of public participation in the management of public affairs appeared in Spain in the 1978's Constitution as a government responsibility. Later, the 1985 Water Law established a model of participation for users within government bodies called Hydrographic Confederations (government agencies for water management organised on the basis of river basins). Since the 1990s, these confederations include actors who were affected by or were interested in water management (Embidi, 2003) and not only those legal agents that had used it for their own benefit. Information, consultation and involvement of the public are required by EU law, particularly by the Directive 2000/60/EC of the European Parliament and of the European Council of 23 October 2000 (a.k.a. Water Framework Directive). The Water Framework Directive goal is to guarantee the good condition of water sources in EU's member countries, which implies the implementation of diverse works in accordance to a specific schedule, as well as the adoption of some basic principles including the participation of the 'wider public' (Arrojo, 2006; Montoya-Hidalgo, 2007).

tensions remain. Delgado, Kjølberg and Wickson (2011) summarize them posing the following five questions: 'Why should we do public engagement?,' 'Who should be involved?,' 'How should it be organised?,' 'When should it be done?' and 'Where should it be grounded?' This PhD dissertation is concerned with the second issue. It refers to the ways in which the 'rules of engagement' are framed (Barnes, 2002) in order to call upon relevant publics (Neveu, 2011), that is, to imbue certain actors with legitimacy.

Legitimacy is a widespread word used in the mass-media and everyday talk in order to speak about the socio-political order, as well as the political and collective action. Considered a 'property of an authority, institution, or social arrangement that leads those connected to it to believe that it is appropriate, proper, and just' (Tyler, 2006:175), legitimacy has a long history within philosophy, psychology and social thought. Although there exist different traditions and approaches, these generally assume some kind of dependent variable (for example, group consensus, dominant ideologies, discourses, etc.) which involve the voluntary acceptance of something as 'right' and whose consequence is the stability of a given phenomenon (for instance, social order, hierarchy structure, authority system, etc.) (Zeltditch, 2001).

The legitimacy of public participation is not a common topic in research literature, where studies on social institutional order (see, Berger & Luckmann, 1966; French & Raven, 1959; Habermas, 1992; Jost & Banaji, 1994; Lipset, 2007; Parsons, 1960), social mobilisation (see, Gamson, 1975; Tilly, 1978; Zald, 1999) and political violence (see, Sabucedo, Barreto, Borja, De la Corte, & Durán, 2006; Van Den Broek, 2004; Varela-Rey, Rodriguez-Carballeira, & Martín-Peña, 2013) proliferate. However, the importance of the topic is steadily increasing.

In political science, more than a decade ago, the status of legitimacy of specific sectors of 'the public' was viewed as a phenomenon to be taken seriously into account within the theories on public opinion. In this regard, Crespi (1997) defends that 'measures are needed of the extent to which specific alternative viewpoints are accepted, or rejected, as legitimate issues for political debate; which forms of collective and individual expressions of opinion are regarded as to be politically legitimate for specific issues; and who is considered to be legitimately entitled to participate in, and perhaps even lead, decision making on specific issues' (p. 165).

In political philosophy, the legitimacy of public participation is a relevant part of deliberative democratic theories. According to Benhabib (1996), a public process of deliberation is appropriate when 'all have the same chance to initiate speech acts, to question, to interrogate, and to open debate'. In such a situation, 'there are no prima facie rules limiting... the identity of the participants, as long as each excluded person or group can justifiably show that they are relevantly affected by the proposed norm under question' (Benhabib, 1996:70). Some deliberative democratic theorists expect the participants in a debate to justify why they consider their positions to be legitimate (Fisher, 2009). However, in more recent pieces of work, other deliberative scholars argue that the theory itself takes into account 'legitimate' and 'illegitimate' forms of exclusion (Dahlberg, 2013).

In STS, the legitimacy of technical decision-making processes in the public domain is a frequent concern (see, Aibar, 2012; Callon et al., 2009; Fuller, 2003; Jasanoff, 2003; Lengwiler, 2008; Rowe & Frewer, 2005), and a lot of work has been done so far to explore how public participation can legitimise certain decisions at the points where science and technology intersect. According to Collins and Evans (2002),

this 'Problem of Legitimacy' has been solved by STS scholars 'by showing that the basis of technical decision-making can and should be widened beyond the core of certified experts' (p. 237). However, the authors continue, the degree to which laypersons' engagement in technical decision-making extend is still an issue to be resolved. In this way a 'Problem of Extension' arises. For instance, analysing a debate over genetically modified crops taking place in the United Kingdom (the 'GM Nation?'), Irwin (2008) shows how the construction of 'the public' represented an important manifestation of boundary work. During the debate, the participation of 'stakeholders' was perceived as problematic, and the constitution of a larger, 'more representative' public was demanded.

Currently, the different ways through which public participation is defined, legitimised and thus actively produced by official bodies, scholars and citizens is a key topic in a growing number of evaluations of techno-scientific issues and participatory mechanisms (Barnes et al., 2003; Barnes, 2002; Delgado, Kjølberg, & Wickson, 2011; Neveu, 2011). The importance of an enquiry about this topic is stated by Wickson, Delgado and Kjølberg (2010) as follows:

'...understanding the significance, implications, merit and utility of different ways of framing the public, and being sensitive to how these frames support (...) justifications for why engagement is important, is necessary for the development of a more nuanced discussion on exactly who or what we are referring to when we are talking about engaging the public.' (p. 758)

The interpretations of the empirical data on the RLP that I offer in this dissertation are part of this emergent field of study. In order to fulfil my objectives and answer the research question, **the RLP are defined here as the set of principles**

governing the election of a person or a group as a worthy member of the public involved in techno-scientific controversies. The RLP are thought of as part of the practical knowledge people apply when faced with debates on complex issues. Concretely, it is conceived as a central tool employed by speakers and observers when an inventory of the politically relevant players involved in a 'democratic' articulation of controversies is made. In this dissertation, I focus on how these regimes of worth are deployed by the participants in a set of Catalonian focus groups on water issues, as well as by researchers when testing a new form of hyperlink analysis applied in the study of 'New Water Culture'.

The notion of RLP is not used as a deductive category which I applied to the data. Instead, it is an emergent category developed *ex post facto* as a notion with which a phenomenon grasped by the three published papers – although initially not addressed enough in them – can be named⁶. I propose the term RLP here in order to recognise and explore the phenomenon and, at the same time, to offer a link which brings the three analytical chapters together. Thus, the RLP will be the guideline around which my dissertation can be understood in its whole.

1.4. Structure of the dissertation

This dissertation is divided into four chapters. Following this Introductory Chapter, Chapter 2 includes two papers concerned with the public understanding of public participation in techno-scientific controversies. In the first paper (Section 2.1.) the data come from a set of eleven focus groups carried out in seven Catalonian cities (Ampostà, Barcelona, Girona, Granollers, Lleida, Tarragona, and Terrassa) during 2006. A qualitative content analysis aims to explore what 'citizenship' means when people

⁶ This is the reason why the notion of RLP is not used in any of the chapters: it was coined after the papers have been written.

speak about 'citizen participation'. The data analysis and discussion reveal the existence of five categories of players employed by the focus group participants. The categories are the following: 'experts', 'affected' people, 'beneficiaries', 'profit-seekers' and 'aware' people⁷. The criteria that people use in order to identify, within this inventory, those actors who are legitimate participants in water controversies may be extracted from Section 2.1. Taking into consideration the analysis presented in this paper, it can be said that there is a sort of 'epistemic' foundation for proper modes of participation to be accounted for. However, additional sources of legitimacy can be identified using the same data, as I discuss in Chapter 4.

The second paper which forms part of Chapter 2 (Section 2.2.) is based on the analysis of six of the eleven focus groups mentioned above. These were carried out in Amposta, Barcelona, Girona, Granollers, Tarragona and Terrassa. Tracking the spatial categories used in the discussions, a variety of denominations employed by the participants to speak about water problems in Spain are identified in this section. The analysis is focused on the three most frequently used toponyms ('Spain', 'Catalonia' and 'Valencia'), establishing their utility and characterising discursive actions that participants perform with them.

Section 2.2. introduces a pragmatic approach to the data showing that, in a given communicative context, participants in our study use space labels in order to carry out different actions. One of them is the identification of groups whose activities are regarded as relevant by the speakers when they are talking about 'water problems'. The populations usually appear as linked pairs; pairs which are a basic element in what can be interpreted as a Political Geography of Common Sense mobilised in talk. Such

7 In Spanish: 'expertos', 'perjudicados', 'beneficiados', 'interesados' and 'concienciados'.

folk geography is a mode of organising common-sense knowledge on place-grounded political actions and institutions. With it, speakers articulate 'water problems' as spatial issues as well as political struggles. In the general discussion of this PhD dissertation the Political Geography of Common Sense is interpreted as a toolkit closely connected to the RLP. It offers a number of key resources for people to actively constitute the public they are speaking about.

Chapter 3 introduces a change in the research subjects as well as in the methodological approach employed. In Section 3.1., a paper on the publicity of sustainability in water policy is included. The paper focuses on the way different organisations exploit the Web with the aim to participate in the debates about water policy in Spain and to define the topics involved. To examine such a phenomenon an issue network articulated around an alternative water policy called 'New Water Culture' (NWC) is drawn up. The composition of this web structure, its hyper-linking styles, key nodes and political trajectories are examined. The outcomes indicate that the NWC has become a main frame in Spanish environmental policy. However, for the purposes of this dissertation, more important than these results is the addressing of the rationale and the criteria that the authors of the paper apply to define which players can be considered part of the issue network and which ones cannot.

The Issue Network Analysis, as carried out in Chapter 3, is inspired by the work of Rogers and Marres (Marres, 2002; Rogers & Marres, 2000; Rogers, 2002, 2004) and particularly by the software they use: the Issue Crawler. Although this tool was not used in our Web analysis of the NWC, the logic in which the Issue Crawler is based informs the method deployed in Section 3.1. This rationale, as well as the measurement of the 'authority threshold' of the 'key nodes' identified through the

hyperlink analysis, can be viewed as a particular form of the RLP, as I show in the general discussion of the dissertation. With this form of the RLP in action, social scientists also become involved in the production of the publics they aim to trace and describe.

Chapter 4 discusses the most important outcomes of the three papers (Sections 2.1., 2.2. and 3.1). This final Chapter outlines the structure and operation of the RLP. The answer to my research question is there openly stated, and implications of the RLP for the 'democratisation' of science and technology come to the fore. In order to do that, the discussion is articulated with the aid of notions extracted from the Stengers's (2005) *Cosmopolitical Proposal* and the performative approach of Latour (Latour, 2005; Strum and Latour, 1987). These approaches inclined me to present the RLP as forms of practical knowledge with productive effects on a discursive level and, eventually, in the political arena. Two consequences of the RLP in action – those of exclusion and elite-formation – are considered.

I am fully aware that the outcomes of this PhD dissertation are necessarily preliminary and provisional. The idea of Regimes of Legitimate Participation needs further exploration based on new empirical data. This dissertation concludes by pointing to emergent issues from the study on how publics for public participation are constituted. Future lines of enquiry are suggested.

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Chapter 2

The art of staging

Designing a scene is an art of staging. It is not naked citizens who are participating, each defending an opinion; it is a matter of distributing roles, of artfully taking part in the staging of the issue. It is important here to avoid thinking in terms of stereotypical roles, since in political ecological terms they have to be determined around each issue. I suggest first distinguishing the figure of the expert and that of the diplomat. Experts are ones whose practice is not threatened by the issue under discussion since what they know is accepted as relevant. Their role will require them to present themselves and to present what they know, in a mode that does not foresee the way in which that knowledge will be taken into account. By contrast, diplomats are there to provide a voice for those whose practice, whose mode of existence and whose identity are threatened by a decision. (...) But what about the 'weak' parties (...) who prefer to be left alone, to avoid participating in a decision even if that decision directly threatens their world? (...) I would suggest calling them 'victims' as victims need witnesses. It is the witnesses' role to make them 'present,' not arguing in their names but conveying what it may feel like to be threatened by an issue that one has nothing to contribute to.

*Stengers (2005)
The Cosmopolitical Proposal*

Section 2.1.

Catalonian citizens' perceptions on public and expert participation in water controversies

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Percepciones de los ciudadanos catalanes acerca de la participación del público y los expertos en las controversias sobre el agua¹

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Resumen

La gestión sostenible del agua ha aparecido en España como el centro de una controversia de primera magnitud. En ella, la participación ciudadana es un eje fundamental. A partir del análisis de grupos de discusión realizados en seis ciudades de Cataluña, este trabajo reflexiona sobre la percepción de la participación en los debates sobre el agua. Se presentan cinco actores que aparecen en el discurso de los entrevistados: los «expertos», los «perjudicados», los «beneficiados», los «interesados» y los «conscienciados». Posteriormente, se examinan los criterios que permiten identificar, entre estos actores, los que son considerados legítimos en las controversias hidrológicas.

Palabras clave: percepción social; controversias tecnocientíficas; participación pública; políticas hidrológicas.

Abstract. *Catalonian Citizens' Perceptions on Public and Expert Participation in Water Controversies*

Sustainable water management has become the focal point of a highly important issue in Spain. Citizens' participation in this controversy it is fundamental. Having carried out the analysis of several focus groups in six Catalonian cities (Spain), this study reflects on the perception of participating in discussions on water. Five actors mentioned in interviewees' discourse are presented: the «experts», the «affected», the «benefited», the «interested», and the «conscious». Then, the criteria permitting to identify among these actors those considered to be legitimate participants in hydrological controversies are examined.

Key words: social perception; scientific and technological controversies; public participation; hydrological policies.

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Este artículo responde a un interés por la creciente tecnificación de las controversias públicas en las llamadas «sociedades del conocimiento». Forma parte de un estudio sobre las implicaciones que tiene la participación de expertos y ciudadanos en la toma de decisiones relacionadas con asuntos tecnocientíficos que atañen a la sociedad en general. Tal cuestión se examina aquí en el marco de la gestión, el gobierno y la planificación del agua en España. En el primer apartado del artículo, se propone una introducción a este campo; allí se contextualizan brevemente los debates sobre el agua, resaltando la importancia que la participación pública ha venido adquiriendo en ellos. En el segundo apartado, se presenta la estrategia de investigación sobre la que se sustenta nuestro análisis. En el tercer apartado, se examina lo que los participantes en un conjunto de grupos de discusión expresan sobre los actores que intervienen en las controversias sobre el agua. Se pone especial acento en lo dicho acerca del papel de los expertos y diferentes clases de ciudadanos que aparecen en el discurso. De cada uno de ellos, se resalta el tipo de conocimiento que poseen y la posición que se les atribuye en los debates. Se concluye con una breve síntesis de lo expuesto y con algunas consideraciones referidas tanto a la importancia del conocimiento experto en las controversias, como a la necesidad de examinar la «identidad territorial» como un fenómeno psicosocial que parece intervenir en la comprensión de la participación en las políticas y los planes hidrológicos.

1. Controversias sobre el agua: contexto y cuestiones relativas a la participación

El interés por desarrollar sistemas que permitan una correcta planificación, gobierno y gestión de los recursos hídricos se ha convertido en un asunto de primer orden a partir de la mitad del siglo XX. Desde la redacción de la Carta Europea del Agua (Estrasburgo, 1968), la Conferencia del Agua de las Naciones Unidas (Mar del Plata, 1977) y, particularmente, desde la Declaración de Río sobre Ambiente y Desarrollo (1992), la gestión eficiente y sostenible de dichos sistemas, ya sea en relación con la agricultura de irrigación, con la producción hidroeléctrica o con la provisión de servicios de agua y saneamiento, es una de las cuestiones de mayor importancia en el mundo.

En el caso del Estado español, el agua ha aparecido en los últimos años como «un nuevo tema ambiental en la política nacional» (Jiménez, 2005: 118).

Desde la Ley 29/1985 de aguas, se ha hecho obligatorio elaborar un plan hidrológico nacional que coordine los proyectos emprendidos a un nivel de cuenca. El proceso de planificación consecuente ha activado una amplia oposición social (Arrojo, 2001). En respuesta a una prolongada historia de políticas hidrológicas orientadas a la construcción de grandes infraestructuras —subvencionadas por el Estado con la intención de favorecer el regadío y la producción hidroeléctrica (Arrojo, 2006; Tàbara et al., 2004)—, desde la década de 1980, empiezan a visibilizarse discursos críticos que proponen nuevas formas de enfocar la gestión del agua. En la década de 1990, las movilizaciones contra el Plan Hidrológico Nacional reúnen a diferentes actores que denuncian sus efectos perjudiciales sobre el potencial de desarrollo de diferentes regiones de España (Boné, 2003), su insostenibilidad económica (Albiac et al., 2003), su falta de apoyo científico (Arrojo, 2001) y su desatención a las últimas tecnologías y formas de gestión del agua (Embid, 2003).

A diferencia de las controversias sobre el agua que se habían desarrollado con anterioridad, donde fue dominante el debate entre expertos y políticos (Mülberger et al., 2007), en la oposición al Plan Hidrológico Nacional intervinieron activamente ciudadanos interesados o afectados, muchos de los cuales integraban grupos ecologistas y movimientos territoriales (Tàbara et al., 2004). La creación de espacios abiertos a la participación de estos actores ha estado acompañada de tres fenómenos. En primer lugar, la capacidad del movimiento ecologista español para formular la política ambiental a partir de la generación de conflicto a fin de crear impacto (Jiménez, 2005). En segunda instancia, la prescripción de la consulta y la implicación pública en el derecho comunitario —particularmente de la Directiva Marco del Agua (Álvarez, 2006; La Calle, 2006). En último lugar, la ya conocida insatisfacción frente a los sistemas de discusión, evaluación y toma de decisiones sobre asuntos tecnocientíficos que sólo tienen en cuenta el criterio experto (Einsiedel et al., 2001) y la revisión el papel de los científicos, los gobiernos y el público en la regulación de los procesos de toma de decisiones (Aibar, 2002b; Luján y Todt, 2007).

Como consecuencia de lo anteriormente mencionado, cada vez es más difícil que un asunto de interés público, como la gestión del agua, se sustraiga del debate abierto, porque se le considera un «asunto técnico» (Graña, 2005). Los pronunciamientos acerca de la seguridad, la viabilidad o la utilidad de proyectos concretos están cada vez más sometidos al escrutinio y al cuestionamiento de los medios, las organizaciones no gubernamentales, las entidades gubernamentales y los sectores comprometidos de la sociedad civil (Stilgoe, 2007). De allí el uso cada vez más extendido de mecanismos consultivos y de participación directa, como las conferencias de consenso, las audiencias públicas, los paneles ciudadanos, los grupos temáticos, la gestión negociada y el referéndum (Aibar, 2002b; Goven, 2003; Lezaun y Soneryd, 2007). El adecuado diseño y ejecución de estos mecanismos requiere del examen de lo que la participación ciudadana es e implica. Comprender tales cuestiones, desde la óptica de los sujetos llamados a integrarse en las contro-

versias tecnocientíficas, puede ayudar en la democratización de las políticas ambientales en general, y de las hidrológicas en particular. En coherencia con estas afirmaciones, en el presente artículo examinamos cómo la participación ciudadana en las controversias hidrológicas es percibida socialmente en Cataluña (España). Hemos ubicado nuestro estudio en esta comunidad autónoma porque el debate en torno a las políticas hidrológicas nacionales ha sido particularmente intenso, además de ser ampliamente conocido por la población en general. Para realizar el análisis, utilizamos extractos de una serie de grupos de discusión llevados a cabo en diferentes poblaciones del territorio catalán durante el año 2006.

2. Diseño metodológico

Este artículo se deriva de una investigación más amplia llevada a cabo mediante once grupos de discusión en los que se ha debatido el tema objeto de nuestra atención. En total, se efectuaron tres en Barcelona, dos en Girona, uno en Granollers, dos en Tarragona, uno en Lleida, uno en Terrassa y uno en Amposta. Se cuidó que los grupos estuvieran equilibrados en cuanto al género y que representaran diferentes rangos de edad (jóvenes, adultos y adultos mayores). Lo que hacía semejantes a los participantes era su procedencia, por lo que fueron incluidos en los grupos de discusión en virtud de su lugar de residencia habitual. Atendiendo a tal criterio, también se contó con la presencia (minoritaria) de extranjeros y de personas que han participado en actividades y/o colectivos relacionados directamente con las controversias sobre el agua. De esta manera, también se esperaba aumentar la heterogeneidad de la muestra, evitar que el discurso fuera redundante (Rubio y Varas, 1997) y facilitar el surgimiento del debate.

Para iniciar los grupos de discusión, se presentaban dos anuncios de periódico que manifestaban posiciones distintas respecto al trasvase del Ebro. A partir de las primeras intervenciones, la discusión fluía de manera espontánea. Con el fin de orientarla hacia los objetivos de la investigación, el moderador manifestaba su interés por conocer la opinión de los asistentes sobre (1) el papel de los expertos, los políticos y los ciudadanos en la controversia, (2) las distintas formas de participación de la sociedad civil en el asunto, (3) los medios a través de los cuales las personas obtienen conocimiento e información sobre el debate y sus detalles científico-técnicos. El análisis posterior del material estaba orientado a identificar la estructura de lo dicho por los participantes (Rubio y Varas, 1997). Para lograrlo, se contó con un conjunto de categorías deductivas que se correspondían con los temas antes mencionados. Adicionalmente, se añadieron otras categorías referentes a temas que aparecieron en las diferentes sesiones.

Durante el desarrollo de los grupos de discusión, se hizo patente que las controversias hidrológicas no son ajenas a los ciudadanos catalanes y que éstos coinciden en considerarlas una cuestión relevante en la sociedad actual. A partir de tal reconocimiento, los asistentes defienden que participar en los deba-

res acerca del agua forma parte de sus derechos y deberes. Sin embargo, también sostienen que, para intervenir, requieren de un conjunto de condiciones, entre las que sobresale la posesión de ciertos tipos de conocimiento. A continuación, analizamos lo expresado al respecto, acompañando nuestras interpretaciones con formulaciones de los propios entrevistados.

3. Participación y conocimiento en las controversias sobre el agua

3.1. *Saber ciencia para participar*

Un tema obligado durante los debates entre los entrevistados atañe a la posesión, por parte de los ciudadanos, de conocimiento relevante sobre las controversias hidrológicas. Este conocimiento es, en principio, información científico-técnica usada para tomar decisiones y justificar la orientación de las políticas ambientales. Participar en una controversia sobre el agua requiere conocer cuestiones como el estado de los ríos, su biodiversidad, la dimensión de los caudales, las fuentes posibles de contaminación, la viabilidad de la desalación, etc. Sin embargo, no son pocos entre los entrevistados que aseguran no estar suficientemente informados sobre dichos tópicos:

Yo me siento muy desinformada. (N4.Girona1.30)

[...] de la situación del agua, tampoco soy demasiado entendido. (H4.Granollers.9)

Yo tampoco tengo una opinión tan elaborada. (H3.Tarragona1.12)

Expresiones como las anteriores no implican un desconocimiento absoluto. En las dos últimas, se encuentran matizaciones que nos hacen pensar en la existencia de un saber mínimo. Afirmar que no se es «demasiado entendido» o que no se tiene «una opinión tan elaborada» supone la posesión de algún grado de información que, sin embargo, es valorada como insuficiente por los entrevistados. Así, los conocimientos que ellos mismos manifiestan durante los grupos de discusión son autoevaluados como carentes de la profundidad que requieren los procesos consultivos y decisorios:

Lo que pasa, por ejemplo, si me dijeran que tengo que decidir realmente, se me haría muy difícil, porque yo no estoy suficientemente informada, no me vería capaz de hacerlo, ¿no? O sea, por lo tanto, si a mí me dijeran «decídelo», yo creo que me abstendría. (D1.Barcelona3.22)

En este fragmento, se aprecia el carácter «insuficiente» del conocimiento que los asistentes se atribuyen a sí mismos. Se encuentra también la utilidad de esta autovaloración al justificar la ausencia de implicación en procesos de planificación, gobierno y gestión de los asuntos hídricos. Dichos fenómenos podrían interpretarse como una prueba de que los ciudadanos requieren formación científico-técnica para adquirir un papel relevante en

las controversias² o de que, simplemente, deben ser suplantados por expertos en temas ambientales. En efecto, algunos entrevistados señalan la necesidad de aumentar la educación de la población en materia hidrológica o de dejar la definición de las políticas en manos de científicos y técnicos. Sin embargo, estas ideas no son las que más se manifiestan en los grupos de discusión. *Frecuentemente, el conocimiento experto no es simplemente solicitado, sino más bien reposicionado.* Al respecto, obsérvense las siguientes intervenciones:

Yo creo que se tienen que hacer informes científicos, se tiene que informar de todas las variables, cuáles son las posibilidades que se tienen para solucionar determinados problemas. Pero yo creo que, al final, el que vive en el río tiene que decir: «Si a mí no me importa, si es esto el problema, darte tanto»; y el que la tiene que recibir [el agua] decir... «Bueno, si no es del río la coja de otro sitio, de desalinización» o de lo que sea. (N2.Barcelona1.10)

Tampoco estoy de acuerdo que un experto tenga más derecho a opinar que uno que vive allí. Es decir, si yo vivo allí tendría más derecho por vivir allí, porque un experto hace sus planes, sus teorías científicas, pues muy bien ¿no? Es su opinión, pero el que vive allí simplemente porque siempre ha vivido allí y le gusta ver el río lleno de agua me parece un derecho. (H2.Barcelona2.6)

Como puede notarse, los entrevistados no rechazan la participación de los expertos en las controversias. Los especialistas tienen un rol determinado en ellas (por ejemplo: «hacer informes»), pero dicho papel no es más importante que el que pueden desempeñar otros actores. Su conocimiento ha de entenderse como una «opinión» equiparable a otras, y el «derecho» a expresarlo, como algo que no es privilegio exclusivo suyo. Así pues, *los expertos pueden verse como sujetos en relación con otros y cuyo saber ha de entrar en negociación con el conocimiento de esos otros.* En concreto, se hace referencia a las personas directamente afectadas por los proyectos hidrológicos («[...] el que vive allí simplemente porque siempre ha vivido allí [...]).

La reconsideración del papel de los expertos está asociada con la valoración positiva de la «opinión» del lego. Este último, en virtud de su experiencia, deviene interlocutor válido en las controversias hidrológicas. Adviértase que, en los fragmentos que examinamos, los entrevistados no recurren al discurso de la «información insuficiente». Los actores locales son vistos como participantes de pleno derecho en virtud de sus conocimientos. Son lo que puede llamarse «expertos

2. Dentro de los estudios sobre la comprensión pública de la ciencia, este argumento se conoce como «modelo del déficit». Se refiere a la idea según la cual el público se resiste a la ciencia y a la tecnología porque no comprende suficientemente la información especializada (Aibar, 2002a; Stenekes et al., 2006) y sostiene que la falta de alfabetización tecnológica estaría en la base de la ineficiencia de los ciudadanos a la hora de juzgar asuntos científico-técnicos de interés público y de participar en la definición de políticas científicas (Tytler et al., 2001; Sturgis y Allum, 2004).

contributivos no certificados» (Aibar, 2002b)³. Dichos legos expertos amplían lo que puede considerarse conocimiento legítimo en una controversia. La autoridad de su saber no viene marcada por un aval institucional —como en el saber especializado—, sino por la experiencia cotidiana y por los efectos que tiene en sus vidas la toma de decisiones acerca de la controversia. El siguiente fragmento también puede ser interpretado en esta dirección:

[Los expertos] tampoco tienen que tener el derecho final de todo por saber un par de libros más, ¿no? Bien, su opinión, bien, muy bien, escuchar de todo; pero al final, yo creo más a un campesino de esa zona que a un biólogo que ha leído libros, porque al final..., por tradición, por cultura, por vivir, porque sus padres vivían así..., sabe mejor sus intereses. (H2.Barcelona2.9)

Afirmaciones como estas recuerdan el estudio clásico de Collins y Pinch (2002) sobre controversias en las que se resalta cómo los granjeros del Reino Unido, afectados por la catástrofe de Chernobil, perdían autonomía bajo la jurisdicción de una lejana burocracia científica, y cómo su saber local derivado del conocimiento de las condiciones del terreno podía ofrecer datos relevantes sobre las radiaciones y su medición. El fragmento también remarca que el conocimiento de «un campesino de esa zona» no se refiere solamente a su entorno natural, sino también a su posicionamiento político-económico («sabe mejor sus intereses»). Así, apuntala el valor del saber —tanto «natural» como «social»— del lego, pero hace algo más: traduce la forma de concebir las controversias tecnocientíficas. Éstas no aparecen como debates sobre «hechos» o «pruebas», sino como una «lucha de poderes» (D1.Barcelona3.62).

La traducción de las controversias tecnocientíficas en «luchas de intereses» o «luchas de poder» reposiciona a los actores que se ven comprometidos en los debates hidrológicos. Las personas afectadas no son solamente «expertos contributivos no certificados», sino actores que defienden su propio provecho. Los científicos y técnicos, por su parte, dejan de ser quienes aportan el argumento neutral y definitivo que cierra los debates, para convertirse también en garantes de intereses concretos. Dicha posición es, en cierto sentido, problemática para estos últimos actores. El conocimiento que detentan, tradicionalmente visto como objetivo e imparcial, pierde dicho estatus para apreciarse como ligado a fenómenos que no son estrictamente científico-técnicos:

Yo pienso que sí y seguramente están basados y tienen una base científica muy correcta y muy adecuada. Lo que interese que salga a la luz o que no salga a la luz es otro tema... que puede interesar a unos o a otros. «Esto lo escondemos porque esto no..., ahora no interesa que salga», o «lo sacamos en el momento mas oportuno». (D1.Tarragona1.11)

3. Los expertos contributivos no certificados son determinados grupos del público no científico que —en virtud de su experiencia continuada sobre las circunstancias locales en las que desarrollan sus actividades— poseen conocimientos relevantes para la controversia (Aibar, 2002b).

[...] ya he vivido unos años en este mundo para darme cuenta de por qué hacen estas cosas, ¿no? Que no las hacen porque les interesa la naturaleza, ni porque quieren dar de beber a las personas..., ¿no? Las hacen porque tienen amigos en tal constructora [...] Muchas veces, son expertos que han estudiado muchísimo, pero luego no tienen interés para ir al centro de la cuestión. (H2.Barcelona2.10)

Los anteriores extractos ponen en boca de los ciudadanos lo que Espluga (2004) ha resaltado a propósito de la gestión de riesgos tecnológicos: que las estimaciones e interpretaciones de los expertos no son axiológicamente independientes y que suponen una perspectiva política o ideológica. Este reconocimiento ha sido rastreado por Lujan y Todt (2007) en su estudio sobre la percepción del «principio de precaución» en España. Según estos últimos autores, los ciudadanos españoles, por un amplio margen, consideran que los científicos pueden estar influidos por valores e intereses económicos. Así lo dan a entender también los entrevistados en nuestro estudio cuando resaltan que las investigaciones, y su uso, pueden transformarse debido a las coyunturas políticas, las orientaciones de las entidades que financian a los especialistas, el posicionamiento político de los expertos, la influencia de grupos de presión o la corrupción política.

En los fragmentos, también se percibe una disminución del valor del saber especializado. Así pues, en los grupos de discusión, *la participación de los expertos no solo es equiparada a la de otros actores, sino que se le resta importancia e, incluso, se le deslegitima*. Los entrevistados manifiestan darle más crédito al «perjudicado» («Yo creo más a un campesino de esa zona», H2.Barcelona2.9). Desconfían de la relación percibida entre el conocimiento experto y las ideologías políticas o los intereses económicos, porque les impide «ir al centro de la cuestión», es decir, participar de manera determinante (y ecuánime) en los procesos de toma de decisión política.

A medida que el saber especializado pierde su estatus de objetividad, y que el saber del lego ve aumentada su autoridad, se abren oportunidades para la participación ciudadana. Esta última aparece como necesaria en un contexto conflictivo en el que se reivindican los intereses de los «perjudicados» y se procura salvaguardarlos frente a los de otros colectivos que desconocen (o pretenden desconocer) los efectos negativos de los planes hidrológicos sobre ciertas poblaciones. Al examinar las condiciones en las que hacen deseable esta participación, los entrevistados negocian sobre el significado del conocimiento experto en las controversias sobre el agua. Lo hacen discutiendo sobre la forma como es asimilado, utilizado o cuestionado por actores distintos a los científicos y los técnicos. Como resultado de este proceso, junto a los especialistas y los «perjudicados», aparecen en el discurso otros actores que, aunque pueden integrarse en los debates sobre el agua, tienen un estatus epistemológico y una legitimidad percibida diferente en cada caso.

3.2. Clasificación y cualificación de los ciudadanos en virtud de su saber

Hasta este momento hemos mostrado cómo, en el discurso de los entrevistados, el saber experto no simplemente es reclamado, sino también reposicio-

nado. Al hacerlo, la información científico-técnica ve disminuido su valor, deja de percibirse como el requisito sin el cual la participación en debates hidrológicos es imposible, y se convierte en una «opinión» que puede ser contrastada con otras. De esta manera, los ciudadanos pueden situarse como interlocutores válidos en las controversias hidrológicas, en la medida que sus propios valores y juicios pueden ser reconocidos.

Llegados a este punto, conviene preguntarse: «¿De qué ciudadanos estamos hablando?». Como ya hemos indicado, el discurso apunta a que las personas que viven cerca de los ríos objeto de debate han de ser las participantes legítimas en las controversias sobre el agua. Son ellas las que ven aumentada la autoridad de su saber y las que ven reconocidos sus intereses locales. Sin embargo, en los grupos de discusión también son mencionados otros ciudadanos a quienes se les asignan, en virtud de su saber, distintas posiciones en los debates hidrológicos. Para referirse a ellos, los entrevistados usan las categorías de «beneficiados», «concienciados» o «interesados».

Durante los grupos de discusión, la palabra *beneficiados* suele aplicarse a los usuarios domésticos que tienen asegurado su consumo diario gracias a los planes hidrológicos⁴. Algunos entrevistados consideran que dichos actores deberían ser participantes regulares de los debates sobre el agua:

[...] yo pienso que se debe dar voz a los usuarios del recurso, ¿no? Que si se habla de un trasvase [...] pues la gente beneficiaria o perjudicada por las consecuencias de este trasvase pues debe sentirse representada, debería dar su punto de vista. (H2.Girona.20)

En este fragmento, la posible implicación de la «gente beneficiaria» es puesta en relación de igualdad con la participación de la «gente perjudicada» (es decir, de los actores locales). Los dos tipos de ciudadanos pueden intervenir en las controversias hidrológicas, ya sea mediante otros actores que actúan en su nombre o expresando sus preocupaciones directamente («debe sentirse representada, debería dar su punto de vista»). Sin embargo, en el desarrollo de los grupos de discusión, resulta habitual que esta simetría sea cuestionada.

Ya hemos mencionado, en páginas anteriores, que los «perjudicados» son vistos como agentes que poseen un conocimiento válido que les autoriza a participar. Ahora es necesario resaltar que, por el contrario, *los «beneficiados» suelen ser percibidos como sujetos carentes de conocimiento seguro*. Así, al entrevistado antes citado le responde otro en los siguientes términos:

4. También se suele denominar «beneficiados» a miembros de diferentes sectores económicos que obtienen ganancias de la planificación hidrológica; sin embargo, aquí reservamos para ellos el término «interesados». Obramos así, no solo porque los entrevistados lo hacen con frecuencia, sino porque de esta manera se resalta el carácter activo de los actores económicos en la controversia. De los «interesados», se afirma (o se sugiere) que realizan acciones a favor de sus intereses; mientras que los «beneficiados» simplemente obtienen provecho de lo gestionado por otros.

[...] estoy totalmente de acuerdo con eso que dices; pero yo pienso que hay otro punto que es, que para que estos ciudadanos puedan hacer y puedan dar su opinión, deberían partir de una información totalmente imparcial. (N1.Girona1.21)

En esa intervención, no se descarta que los «beneficiarios» puedan tener algo que aportar a las controversias sobre el agua. Sin embargo, se sugiere que cuentan con información incompleta (o, más bien, sesgada) respecto a los temas sobre los que se discute. Al igual que los expertos y los «perjudicados», solo tienen un conocimiento parcial; sin embargo, en el primer caso, este conocimiento está sustentado científicamente y, en el segundo, experiencialmente. Los conocimientos de especialistas «seguramente [...] tienen una base científica muy correcta» (D1.Tarragona1.11); la persona que vive junto a un río que va a ser trasvasado, «por tradición, por cultura, por vivir, porque sus padres vivían así..., sabe mejor sus intereses» (H2.Barcelona2.22). El conocimiento de los «beneficiados», por su parte, está prefigurado por otros. Su opinión y voluntad no le pertenecen, son los que un segundo tipo de actor le implanta:

Yo no veo que el mundo científico tenga una plataforma de difusión que haga llegar realmente aquello que esta estudiando de una manera clara [...] Hay revistas científicas que entre ellos lo saben todo; pero a nosotros no nos llega eso. [...] Si la ciudadanía nos tenemos que fiar de los medios de comunicación, yo ya hace mucho tiempo que dije que se había terminado, que no confiaba en ellos. Que veo que hay unos intereses detrás muy grandes y que, a veces, no tenía que ver con los partidos políticos, sino que tiene más que ver con la economía y los intereses económicos. (H2.Terrassa.12)

El conocimiento parcial de los «beneficiados», mediatizado como es, se ve deslegitimado por la falta de transparencia de las fuentes de las que es obtenido. Estos actores no podrían expresar un juicio adecuado sobre las cuestiones hídricas, debido a que están influidos por la propaganda emitida a través de los medios de comunicación. En tal dirección, los entrevistados resaltan la existencia de «intereses detrás muy grandes» que determinan el tipo de conocimiento que llega a los ciudadanos. Así, los medios, como los expertos, pueden aparecer como herramientas empleadas por actores «interesados» en que las controversias sobre el agua se clausuren a favor de su propio beneficio.

La categoría «interesados» suele reunir a dos tipos de actores: (1) los partidos políticos y las administraciones, que buscan mantener una tendencia de voto favorable, prometiendo y/o llevando a cabo determinadas intervenciones hidráulicas⁵, y (2) los representantes de diferentes sectores económicos (la agricultura, el turismo, la construcción, la producción hidroeléctrica, etc.), que pueden obtener ganancias con dichos proyectos. *Estos agentes «interesados»,*

5. Estos actores también pueden estar interesados en obtener ganancias económicas; en cuyo caso los entrevistados hacen referencia, fundamentalmente, a casos de corrupción política relacionada con el sector inmobiliario.

independientemente o en connivencia, suelen aparecer en el discurso como poseedores de información privilegiada que solo entregan en la medida y forma que favorezcan a sus intereses. Su participación en la controversia pasar por el empleo estratégico del saber entregado por los expertos para justificar sus propuestas, así como por una difusión tendenciosa de dicho saber para orientar la opinión pública a su favor.

La forma de percibir a los «interesados» es especialmente llamativa, ya que algunos de los actores económicos que se mencionan (en concreto, los «regantes» y las «hidroeléctricas») son usuarios con título concesional que integran los órganos de gobierno de las confederaciones hidrográficas. Los mismos, hasta la década de 1990, han sido los únicos ciudadanos con posibilidad de participar en la gestión de cuencas. Por otro lado, los actores políticos (especialmente las administraciones), han servido habitualmente de mediadores entre diferentes intereses en disputa y han tomado las decisiones tendientes a regular, entre otras cosas, los asuntos medioambientales. La desconfianza que se expresa respecto a su participación en las controversias y al conocimiento que ofrecen (o que permiten ofrecer), puede ser interpretada como una manifestación de un descontento social frente a la forma como se han gestionado los temas hidrológicos en España hasta hace pocos años.

En este contexto de desconfianza —donde también puede incluirse la disminución de la relevancia que se le da a la «opinión» de los expertos y a la caracterización de la «opinión» del «beneficiado» como puramente ideológica (entendiendo *ideología* como sinónimo de *mala conciencia*)—, surge otro tipo de ciudadano que se percibe como participante legítimo en los debates hidrológicos. Ellos son los llamados «concienciados», definidos en el grupo de discusión de Tarragona como:

[...] la gente que busca [...] que entra en Internet. Hay gente que ya tiene conciencia porque ya se preocupa sobre el tema. (D1.Tarragona1.27)

Tales ciudadanos se encuentra también interesados por el desarrollo de las controversias, pero no porque puedan obtener beneficios económicos o políticos. En lo dicho por los entrevistados, *los «concienciados» aparecen como simplemente atraídos o preocupados por los debates sobre el agua debido a que los consideran actuales e importantes.* Son, de hecho, sujetos que buscan información por su cuenta y para satisfacer su propia curiosidad.

La identificación de estos actores establece una nueva clasificación. Así como existe, entre los ciudadanos, «gente perjudicada» y «gente beneficiada», también es posible encontrar «concienciados» y «no concienciados»:

Puede ser que la manera de cribar entre el concienciado y el no concienciado sería ceder más fácilmente toda la información sobre este tema. Poder alegar, poder moverte si estás interesado; pero no necesariamente que te vengas a consultar a casa sobre el tema que quieres hacer, ni que te bombardeen con información sesgada [...] Es decir, que quien quiera preocuparse por el tema

pueda acceder fácilmente a la información, pueda formarse una opinión y pueda participar en el proceso de decisión. (H1.Girona2.9)

Del fragmento, puede derivarse que los «no concienciados» están exentos de preocupación por los temas hídricos y, en esta medida, no realizan acciones tendentes a obtener información sobre ellos. Se encuentran satisfechos con lo que se les entrega a través de lo que, en el fragmento, se denomina un «bombardeo de información sesgada». Son, de este modo, epistemológicamente idénticos a los «beneficiarios»: sujetos heterónomos carentes de conocimiento seguro para participar en las controversias. Como es de esperar, con frecuencia, los «beneficiados» son considerados, al mismo tiempo, ciudadanos «no concienciados»:

Aquí no vemos la [televisión] autonómica valenciana, pero seguro que durante todo el conflicto les estuvo diciendo «nos hace falta tanta agua, a Valencia nos hace falta tanta agua y estos desgraciados la están tirando». O sea, imagínate lo que les deberían llegar a decir, esta gente [...] Por eso te lo digo [el actor que debe tomar las decisiones]: no puede ser nadie de aquí ni de allí, tiene que ser alguien de fuera. (H1.Barcelona3.16)

En este fragmento, se puede advertir la necesidad sentida por algunos de los entrevistados de contar con agentes imparciales que medien entre los diferentes participantes de la controversia. La propuesta es coherente con la línea argumental que hemos venido siguiendo. Debido a que quienes intervienen en la controversia, sean «perjudicados» (los «de aquí») o «beneficiados» (los «de allí»), tienen intereses en juego, y que las autoridades políticas son puestas en duda como mediadores transparentes, el entrevistado sugiere la intervención de «alguien de fuera». En este caso, se refiere a una comisión de expertos de la Unión Europea⁶; sin embargo, los ciudadanos «concienciados» gozan de un estatus similar al de este mediador externo. De ellos se dice que pueden «participar en el proceso de decisión» (H1.Girona2.9), debido a que se han formado una opinión fundamentada a partir de información que ellos han consultado, contrastado y revisado críticamente:

Yo creo que eso, que si la información que te llega es de diferentes personas, de técnicos de diferentes partes, puedes agarrar más un criterio después [...]

6. El entrevistado lo expresa así: «se deberían buscar criterios objetivos, científicos, no sé. Una comisión europea que [...] evalúe este tipo de obras» (H1.Barcelona3.11). A la capacidad de ofrecer una mirada imparcial, otros entrevistados le suman una ventaja más a la participación de la «comisión europea»: su capacidad de frenar proyectos y planes hidrológicos controvertidos, debido a que las infraestructuras sobre las que se debate pueden estar financiadas con el Fondo de Cohesión de la UE («Porque mucha, o sea, mucha construcción del País Valenciano está pagada con fondos europeos. Entonces, también no es un problema tampoco de España; también es un poco de Europa, que permite hacer eso» (D4.Girona2.35)).

También es eso, si tu tienes un criterio, y eso más en las generaciones más pequeñas, puedes educar desde la base a los pequeños y ya aprenderán eso: que tengan un criterio, que puedan opinar. (N1.Girona1.668)

Los «concienciados» pueden asegurarse una posición a partir de la revisión de fuentes diversas de información. Fuentes que, presumiblemente, incluirán tanto posturas a favor como en contra de planes o proyectos hidrológicos sometidos a debate. De allí que su posición pueda ser percibida como imparcial o, por lo menos, crítica. Su perspectiva es ciertamente crítica en la medida en que la «opinión» que detentan estos ciudadanos no ha sido simplemente asimilada, sino activamente construida: es un «criterio», un juicio, no una imposición. Su intervención también puede verse como imparcial, puesto que se elabora y se expresa en ausencia de relaciones directas con los beneficios o los perjuicios de un plan o proyecto hidrológico. El «concienciado» es visto como alguien que no tiene nada en juego, salvo su propio sentido moral.

Así pues, igual que una «comisión europea», el «concienciado» es una instancia potencialmente crítica e imparcial. Adicionalmente, puede interpretarse como la intervención de «alguien de fuera» que no solo estaría desvinculado de los intereses en disputa, sino que también se expresaría desde la distancia. Su aparición en el discurso introduce la posibilidad de que la participación ciudadana no se limite exclusivamente al ámbito de lo local. De esta manera, permite *concebir a las controversias sobre el agua como espacios conflictivos donde, si bien debe reconocerse un lugar preponderante a los «afectados», puede participar cualquier persona legítimamente preocupada por los planes o los proyectos hidrológicos.*

Los ciudadanos «concienciados», junto con los «expertos», los «afectados», los «beneficiados» y los «interesados», configuran la constelación de actores que, desde el punto de vista de los entrevistados, se da cita en las controversias sobre el agua. Su aparición en el discurso indica que los debates sobre temas de alto componente tecnocientífico, pero de gran relevancia pública, requieren de algo más que la emisión de un dictamen fundamentado en el saber especializado. Los planes y proyectos hidrológicos, como ha demostrado el amplio movimiento en contra del Plan Hidrológico Nacional de 2001 y como establece la Directiva Marco de Agua, ya no pueden sustraerse del examen público. Así lo indican también los grupos de discusión realizados, en los que ciertos tipos de ciudadanos son valorados como participantes legítimos que han de ser tomados en cuenta en los procesos consultivos y decisorios. Desatender a este hecho significa ir en contra de la percepción pública que ya no entiende las políticas y los planes hidrológicos concebidos, implementados y evaluados sin el concurso de las personas «afectadas» y «concienciadas».

4. Conclusiones

En este artículo, proponemos una mirada sobre las controversias tecnocientíficas públicas en España. Nos ha interesado particularmente examinar, desde

la perspectiva de los ciudadanos catalanes, cómo se entiende la participación de expertos y del público en los debates en torno a intervenciones hidráulicas y a planes hidrológicos. Esta revisión, efectuada sobre los datos recogidos en once grupos de discusión, nos ha permitido identificar un conjunto de «tipos ideales» de participantes en los debates sobre el agua.

En lo que respecta a los «expertos», es factible establecer un primer elemento a resaltar. No solo se entiende por expertos a aquellos especialistas que se pronuncian desde la ciencia o la ingeniería y que cuentan con una acreditación académica que legitima su conocimiento. Por el contrario, se introduce una forma de experticia ciudadana que es altamente valorada y que, incluso, despierta una mayor confianza entre un sector de los entrevistados. Así, aunque se hace referencia a la importancia de la participación de científicos y técnicos en la controversia, su saber no es unánimemente entendido como el único autorizado para pronunciarse acerca del agua. Los «perjudicados» por planes y proyectos hidrológicos, sustentados en evaluaciones tecnocientíficas, también se consideran voces legítimas. Lo son en la medida en que poseen un conocimiento local, fundamentado en la experiencia continuada y cotidiana con las fuentes de agua, que puede resultar útil para la toma de decisiones políticas.

La importancia dada al saber de los «perjudicados» recuerda que la protesta ambiental en España ha estado caracterizada por el localismo (Jiménez, 2005), hecho que se ha manifestado claramente en las movilizaciones en contra del Plan Hidrológico Nacional de 2001 (Pont et al., 2002). Dicho fenómeno parece estar acompañado de una disminución de la legitimidad de los especialistas. Dadas sus relaciones percibidas con los poderes político-económicos y el carácter ideológico de su intervención ya identificado por otros autores (por ejemplo, Espluga, 2004, Lujan y Todt, 2007, o Carvalho, 2007), los entrevistados manifiestan una marcada desconfianza en la posibilidad de que el criterio de dichos expertos sea utilizado como único argumento para cerrar las controversias.

Ahora bien, la parcialidad de los posicionamientos no es exclusiva de los especialistas, es igualmente percibida en los «expertos contributivos no certificados». A ellos también se les reconoce como defensores de intereses particulares. Así pues, no es la falta de objetividad la que deslegitima la participación de científicos y técnicos en las controversias, sino su posición como representantes de las élites políticas y de los grupos de interés económicos que pueden lucrarse con los planes y los proyectos hidrológicos. Los gobernantes, los partidos políticos, el sector turístico y urbanístico, los regantes, las empresas hidroeléctricas o químicas, las depuradoras, las embotelladoras, son categorizados por los entrevistados, uno a uno, como actores «interesados» en tomar las decisiones de acuerdo con su propio beneficio. Su desatención a la afectación de intereses locales hace que los «afectados» sean percibidos como voces silenciadas que es necesario recuperar, aunque eso suponga poner en duda los resultados de las investigaciones científico-técnicas.

En resumen, la participación de los expertos en las controversias hidrológicas es frecuentemente percibida como una estrategia de poder. Su conoci-

miento se concibe como una herramienta a través de la cual los «interesados» justifican las decisiones que desean tomar como un argumento que aplaca a los legos. Es visto como una forma de generar conformidad en la ciudadanía para disminuir su oposición a los proyectos y planes hidrológicos. Esto es especialmente notorio en lo que atañe a los llamados «beneficiados»: ciudadanos corrientes, usuarios domésticos, que obtienen algún tipo de ganancia secundaria de las decisiones tomadas por los «interesados», bajo la asesoría experta.

Los «beneficiados» son personas alejadas de las fuentes de agua en disputa que, sin embargo, recibirán parte de esos recursos, por ejemplo, en la forma de suministro domiciliario. Estos actores, igual que los especialistas, los «interesados» y los «perjudicados», tienen una visión parcial de las controversias. Sin embargo, la misma es el producto de una imposición o de una manipulación urdida mediante el uso de los medios de comunicación. Los «beneficiados» son vistos como ciudadanos que solo reciben información que apoya a las decisiones tomadas por los «interesados» y que, por esto mismo, pueden caracterizarse como «no concienciados». Para ellos, los debates sobre el agua no son un asunto controvertido, no suponen ningún tipo de incertidumbre.

Lo anteriormente comentado no elimina, en principio, la posibilidad de que existan ciudadanos a la vez «beneficiados» por las políticas hidrológicas y «concienciados» de su carácter controvertido. Sin embargo, esta posibilidad —teórica y empíricamente posible— no fue mencionada durante los grupos de discusión. Es frecuente, por el contrario, que las categorías de «no concienciados» y «beneficiados» se mezclen y se usen indistintamente para referirse al electorado valenciano y murciano. En oposición a este ciudadano que es visto como epistemológica y políticamente heterónimo (dependiente del criterio experto y de las decisiones de los «interesados»), surge un actor adicional que, junto con los «perjudicados», aparece como participante legítimo en las controversias sobre el agua: los ciudadanos «concienciados».

Los concienciados representan, en cierto sentido, un retorno al ideal de objetividad e imparcialidad. Son ciudadanos que han construido un criterio propio a partir de la revisión de diferentes fuentes de información disponible y que, al no ser ni beneficiarios ni perjudicados directos de las políticas hidrológicas, parecen no tener ningún interés en juego. Lo que les moviliza no es su propio provecho, sino una curiosidad intrínseca o una preocupación por los temas hidrológicos, en tanto que asuntos de actualidad y de relevancia nacional. Estos ciudadanos se encuentran físicamente alejados de las fuentes de agua que serán o son intervenidas, pero se encuentran próximos a los «perjudicados» porque no desatienden su punto de vista. También guardan alguna cercanía con los «beneficiados», debido a que su conocimiento es indirecto (se obtiene a través de los medios de comunicación), pero se distancian de ellos porque asumen una posición cautelosa frente a la información que reciben. Son sujetos autónomos, con «criterio» propio.

Todos los actores mencionados han sido tenidos en cuenta, por diferentes entrevistados, como participantes posibles en las controversias sobre el agua. Sin embargo, solo algunos de ellos cuentan con la legitimidad suficiente para

intervenir de manera efectiva en la toma de decisiones. Los primeros son los especialistas, que, aunque están acompañados por la sospecha, producen un conocimiento que sigue siendo irrenunciable y necesario, por cuanto los asuntos hidrológicos tienen un alto componente científico-técnico. Los segundos son los ciudadanos representados por los «perjudicados» y los «concienciados», que complementan la experticia certificada con el saber local o que ayudan a realizar el examen desapegado de las diferentes formas de conocimiento en disputa. La aparición de estos últimos actores, en función de un proceso de categorización que funciona sobre dos ejes («perjudicado»-«afectado», «concienciado»-«no concienciado»), hace necesario revisar los posibles efectos de la identidad social en las controversias sobre el agua en España.

El discurso en el que son los «perjudicados» los que pueden y deben decidir sobre un eventual trasvase, y que desconfían de los expertos pagados por las administraciones, de los informes que producen y de los medios que las distribuyen, así como de los ciudadanos «no concienciados» (especialmente si se trata de otras comunidades autónomas), tiene un marcado acento identitario. La aparición de la identidad colectiva, especialmente de corte territorial, en las controversias sobre el agua en España es coherente con investigaciones hechas sobre el ecologismo español (Jiménez, 2005), sobre el ecologismo catalán (Mora i Tico, 1999) y sobre la oposición al Plan Hidrológico Nacional y al trasvase del Ebro (Pont et al., 2002; Tàbara et al., 2004); así como con análisis de autores que han participado en los debates hidrológicos en los últimos años (Arrojo, 2006; Martínez Gil, 1997). Resulta, así, indispensable profundizar en este fenómeno para, así, crear estrategias que aprovechen el poder de movilización que puede llegar a tener la identidad, sin sacrificar la necesidad de diálogo entre los distintos actores que intervienen en los debates hidrológicos. Así mismo, significa preparar de antemano estrategias que disminuyan la posibilidad de que actores «de afuera», pero no necesariamente ilegítimos, se vean excluidos del debate. Obrar de esta manera implica reconocer, como afirman Tàbara et al. (2004), que no existe una única cultura del agua ni «una única moralidad o racionalidad a partir de las cuales poder prescribir unívocamente las mejores políticas ambientales» (p. 154).

Las sospechas que recaen sobre los científicos y los técnicos hacen necesaria, a su vez, una revisión del papel preponderante que se da a los procesos informativos y formativos en las controversias tecnocientíficas públicas. La percepción que se tiene del saber experto como saber parcializado y la concepción de los «beneficiados» como actores heterónomos debido a su aproximación acrítica a la información especializada, son indicios de que el llamado «modelo del déficit» es un viejo ideal puesto en duda por los ciudadanos catalanes. En su reemplazo, se consideran deseables estrategias activas de generación de conocimiento, ya sea mediante la experiencia directa (como en el caso de los «perjudicados») o mediante la construcción idiosincrásica de un juicio (como en los «concienciados»). Estas estrategias no han de ser solo respuestas coyunturales ante la necesidad de justificar un proyecto o un plan hidrológico, sino una actividad estructural y continua. Así, «educar desde la base a los peque-

ños», y hacerlo desde una perspectiva contextualizada y crítica, parece fundamental para que la alfabetización tecnocientífica sea bien recibida y, a la vez, para que potencie realmente la participación ciudadana.

En definitiva, la constelación de actores rastreados en el discurso de los entrevistados dibuja un escenario donde la identidad colectiva y el conocimiento desempeñan un papel preponderante. En las páginas precedentes, la reflexión ha girado en torno a cómo la identidad de los participantes se delimita a partir de valoraciones hechas sobre el conocimiento que producen, obtienen, distribuyen, ocultan o construyen. Hemos visto que las categorías resultantes autorizan a determinados actores, y no a otros, a participar en las controversias sobre el agua. Dichas categorías pueden tener relaciones directas con la ubicación geográfica de los ciudadanos que intervienen en los debates. Adicionalmente, informan de saberes y de procesos de aprendizaje que son más apreciados que otros por los entrevistados. El diseño de espacios consultivos y participativos en materia hidrológica podrían tener en cuenta estas dimensiones psicosociales de la percepción general, a fin de potenciar la implicación del público en las controversias sobre el agua.

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Section 2.2.

Spatial identity categories for the understanding of public controversies

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Resumen

Para acercarnos a cómo los ciudadanos catalanes dan cuenta de las controversias hídricas en España, se analizaron seis grupos de discusión realizados en Cataluña durante 2006. Se utilizó el concepto “identidad social espacial” para las interpretaciones, adaptándolo para resaltar su carácter interaccional. Al rastrear las categorías espaciales empleadas en las discusiones, se identificó la variedad de denominaciones usadas para debatir sobre los problemas hídricos en España. El análisis se centra en las denominaciones más usadas para determinar su utilidad e identificar las acciones discursivas que los participantes realizan con ellas. Los resultados indican que los hablantes dan cuenta de los “problemas del agua” movilizándolo una geografía política del sentido común que resalta el carácter socioespacial y conflictivo de los asuntos hídricos.

Palabras clave autores: categorización, espacio, identidad espacial, identidad social, marcos interpretativos.

Palabras clave descriptores: Análisis del discurso, investigación cualitativa, Controversias sobre el agua.

Abstract

In order to know how Catalan citizens account water controversies in Spain, we analysed six focus groups carried out in Catalonia in 2006. A concept of ‘urban social identity’ is used for our interpretations, having been adapted to highlight its interactional character. Tracking the spatial categories used in the discussions, we

identified the variety of denominations employed to debate water problems in Spain. The analysis is focused on the most frequent categories to establish their utility and identify discursive actions that participants produce. Results indicate that speakers account the “water problems” mobilizing a common sense political geography that highlights the socio-spatial and conflicting character of water issues.

Key words authors: Categorization, space, spatial identity, social identity, interpretation frames.

Key words plus: Discourse analysis, qualitative research, water controversies.

Introducción

En las últimas décadas el agua se ha vuelto un tema de primer orden a nivel mundial. En España, el interés por los asuntos hidrológicos ha estado motivado por la protesta ambiental (Jiménez, 2005) que se ha presentado desde los años setenta (Bergua, 2000). Sin embargo, no es hasta los años noventa que la oposición al Plan Hidrológico Nacional y el trasvase del Ebro¹ sitúan la cuestión como centro de un amplio interés político (Mairal, 1993). Este artículo es el resultado de una investigación interesada en conocer la percepción social de tal fenómeno. En dicha investigación, la identidad ligada al territorio demostró ser un factor a tener en cuenta (Aceros, Tirado & Domènech, 2011). En las siguientes páginas nos acercamos a esta cuestión desde el concepto de “identidad social espacial” (Valera & Pol, 1994).

1 El trasvase del Ebro era una obra hidráulica contemplada en la Ley 10 de 5 de julio de 2001 del Plan Hidrológico Nacional y derogada en la ley 11/2005 de 22 de junio. Con ella se pretendía la transferencia de 1.050 hectómetros cúbicos anuales del río Ebro hasta las cuencas hidrológicas internas de Cataluña, del Júcar, del Segura y del Sur de España.

Los datos provienen de seis grupos de discusión llevados a cabo en Cataluña (España). Su análisis se realiza en coherencia con el reciente giro discursivo en el estudio de la identidad espacial (Dixon & Durrheim, 2000; Taylor, 2003) y está inspirado en el “espíritu etnometodológico” (Antaki & Widdicombe, 1998). Concretamente, emplea herramientas analíticas provenientes del Membership Categorization Analysis (MCA). Con ellas se rastrea en el lenguaje en uso la utilización de denominaciones espaciales que sirven como dispositivos y categorías de identificación social. En este estudio se ofrece una aproximación a tres de las más frecuentemente encontradas en nuestros datos.

El artículo se organiza en cuatro apartados. Los dos primeros presentan consideraciones teóricas y metodológicas que introducen la forma como entendemos y estudiamos nuestro objeto de interés. El tercer y cuarto apartado presentan los resultados y la interpretación de los datos. En la discusión se resaltan las referencias espaciales más prominentes en los grupos de discusión (“España”, “Cataluña” y “Valencia”) y las poblaciones adscritas a dichas categorías. El análisis identifica la movilización de una “geografía política del sentido común” que resalta el carácter socioespacial y conflictivo de los asuntos hídricos.

La identidad social espacial, en la mente y en el discurso

La relación entre identidad y espacio ha sido un tema de interés para diversas disciplinas. En psicología, aparece desde el trabajo de Fried (1963) sobre los efectos adversos de la relocalización forzada. Actualmente es un concepto central para la psicología ambiental (ver, Korpela, 1989; Lalli, 1992; Proshansky, Fabian & Kaminoff, 1983) y para algunos psicólogos sociales (Dixon & Durrheim, 2000; Taylor, 2003). En el

contexto de habla hispana, Valera y Pol (1994) han destacado por su esfuerzo en redefinirlo desde la literatura sobre categorización social y comportamiento de grupos. Su aporte recibe el nombre de “identidad social urbana” (y, de manera más amplia, “identidad social espacial”), concepto que ha sido aplicado en varias investigaciones (ver, Uzzell, Pol & Badenas, 2002; Valera, 1997; Valera, Guàrdia & Pol, 1998).

La lectura que Valera y Pol (1994) hacen desde la perspectiva de la identidad social (Tajfel, 1981) y la Teoría de la Categorización del Yo (Turner, 1990) se ha vuelto popular en psicología en años recientes. Twigger-Ross y Uzzell (1996) proponen entender la identificación con los lugares como una expresión posible de la membresía a grupos humanos. Por su parte, Rollero y De Piccoli (2010) definen la dimensión social del apego de lugar a partir de la pertenencia a grupos territorialmente definidos. Al igual que estos autores, Valera y Pol (1994) conciben la identidad como un sistema cognitivo con el que la persona representa al *self* usando distintas “partes” de su “autoconcepto”. Así, las personas son “perceptores” que cuentan con un conjunto estructurado de “identidades latentes” que se “activan” mentalmente en determinadas condiciones. Tales identidades toman la forma de categorías, es decir, de una “colección de estímulos” que aparecen como iguales al ser comparados con otra clase de “estímulos” (Turner, 1990).

Las categorías identitarias, de acuerdo con este abordaje, se organizan jerárquicamente en tres niveles de abstracción (Turner, 1990): a) el nivel supraordenado que define la identidad de la persona como miembro de la especie humana, b) el nivel intermedio que la define a partir de la pertenencia grupal y c) el nivel subordinado que define a la persona como individuo específico y diferenciado del

resto. Valera y Pol (1994) proponen que en el nivel intermedio se consideren categorías que indiquen la pertenencia a un entorno concreto (Uzzell et al., 2002; Valera & Guàrdia, 2002). Estas categorías se organizarían en tres subniveles. El nivel con menor grado de inclusión sería el de “barrio”. El siguiente nivel tendría un carácter inespecífico y se correspondería a la categoría “zona”. Por encima de él aparecería la categoría “ciudad” como límite de lo que puede considerarse como una identidad propiamente “urbana”.

Aunque Valera y Pol (1994) se muestran de acuerdo con el sistema cognitivo multinivel propuesto por la Teoría de la Categorización del Yo (TCY), también pretenden distanciarse del carácter individualista de la teoría y resaltar los elementos más propiamente sociales de la identidad (social) espacial. En este sentido, recurren al interaccionismo simbólico y al construccionismo social para defender que los entornos urbanos, entendidos como categorías, “vienen determinados por la interacción simbólica que se da entre las personas que comparten un determinado espacio y que se identifican con él a través de un conjunto de significados socialmente elaborados y compartidos” (Valera & Pol, 1994, p. 11). De este modo, lo que inicialmente se entiende como parte del “autoconcepto” pasa a entenderse como una “construcción social”. La identidad sigue siendo definida como el resultado de un proceso privado de categorización, pero los elementos con los que se estructura pasan a ser productos simbólicos de una “relación dialogante” (Valera & Pol, 1994, p. 8) que individuos y grupos mantienen entre sí.

La necesidad de una comprensión más social de la identidad espacial ha sido apuntada por autores como Lalli (1992) o Lewicka (2008). Sin embargo, se han dado

pocos pasos en el estudio de las “relaciones dialogantes” a las que se refieren Valera y Pol (1994). Los mismos autores, al usar predominantemente cuestionarios como técnica de recolección de datos, desatienden el carácter interactivo del fenómeno. Sin embargo, recientes avances en psicología discursiva han empezado a cambiar esta situación (Dixon & Durrheim, 2000; Taylor, 2003). Desde la perspectiva discursiva, la identidad espacial es un acontecimiento intersubjetivo que ocurre durante el habla y gracias a ella. La construcción colectiva e interactiva de la identidad espacial ocurre mediante el uso de recursos simbólicos socialmente disponibles para los hablantes (entre ellos estarían las categorías, así como las metáforas, las ideologías, etc.) que se movilizan durante el intercambio discursivo para realizar diferentes acciones (como tomar posiciones, definir eventos, crear grupos, etc.). La identificación de los recursos usados y/o de las acciones realizadas es el objetivo del análisis discursivo de la identidad espacial.

En este trabajo se abordan los datos en coherencia con el giro discursivo en el estudio de la identidad espacial. Lo hacemos inspirados por una aproximación fundamentada en la sociología de Harold Garfinkel y en los trabajos de Harvey Sacks. De acuerdo con Antaki y Widdicombe (1998), el “espíritu etnometodológico” que caracteriza dicha aproximación se traduce en las siguientes ideas: 1) un hablante tiene una identidad cuando se le asigna o se asigna a sí mismo una categoría socialmente disponible, 2) el significado de esta adscripción reside en el contexto de su producción local, 3) el uso de la categoría vuelve relevante una identidad para la interacción en curso, 4) produciendo consecuencias en la interacción, 5) de una manera observable en la forma como los hablantes emplean el lenguaje en uso.

Actualmente, una de las aproximaciones metodológicas fundamentadas en el espíritu etnometodológico es el Membership Categorization Analysis (MCA). Dicha aproximación es un producto temprano de los trabajos realizados por Harvey Sacks sobre los métodos que los hablantes emplean para producir actividades como fenómenos observables y reportables (Silverman, 1998). El supuesto del que parte el MCA es que una de las formas de lograrlo es generando categorías que agrupan en “colecciones” lo que de otra manera serían “objetos” dispares (Antaki & Widdicombe, 1998). Este proceso de categorización, a diferencia del propuesto por Turner (1990), no es una actividad mental sino una práctica social, metódicamente realizada en situaciones interactivas, a través del lenguaje. Concretamente, se trata de la selección y comprensión local y social de los términos más adecuados para referirse a los miembros de una población o grupo (Schegloff, 2007).

La categorización que interesa al MCA se lleva a cabo movilizándolo en la conversación tres tipos de recursos: los dispositivos de membresía por categorización (*membership categorization devices*), las categorías de membresía (*membership categories*) y las actividades ligadas a las categorías (*category-bound activities*). Las primeras son las denominaciones bajo las que se agrupan las segundas, es decir, son colecciones de categorías de membresía. Unas y otras tienen actividades o atributos convencionalmente asociados a ellas (Housley & Fitzgerald, 2002); esto es, derechos y obligaciones imputables a los miembros de una población dada (Schegloff, 2007). La vinculación recurrente –de “sentido común”– entre los dispositivos, las categorías y las actividades hace que los hablantes puedan derivar los unos de los otros, aplicando una serie de reglas.

El MCA se ha utilizado predominantemente para el estudio de las categorías descriptivas aplicables a los seres humanos (Housley & Fitzgerald, 2002), entre las que se encuentran los gentilicios (Schegloff, 2007). También se ha utilizado para analizar la selección de formulaciones de localización relevantes (Schegloff, 1972) y lo que McHoul y Watson (1984) llaman las “ecologías del sentido común”, es decir, las maneras profanas de organización del conocimiento geográfico. Nosotros proponemos trasladar esta aproximación metodológica al estudio de las denominaciones o referencias espaciales que se vuelven relevantes en contextos de interacción y que funcionan como dispositivos de identificación de personas y grupos. Se trata de hacer, desde un punto de vista discursivo, lo que Valera y Pol (1994) proponen desde una mirada predominantemente cognitiva.

Método

Material

Los datos provienen de seis grupos de discusión realizados en diferentes ciudades catalanas (Amposta, Barcelona, Girona, Granollers, Tarragona y Terrassa) durante el año 2006. Este tipo de metodología se utiliza actualmente como una de las formas de obtener datos relevantes para la investigación etnometodológica (ver, Puchta & Potter, 2004). Los grupos tenían una composición heterogénea, pero estaban organizados en torno a los mismos criterios. Se procuró un número igual de hombres y mujeres, con diferentes rangos de edad (jóvenes, adultos y personas mayores) y un perfil ocupacional variado. Las ciudades seleccionadas representan dos tipos de proximidad geográfica con respecto al principal foco de conflicto en relación al trasvase del Ebro. Mientras Amposta y Tarragona son poblaciones cercanas al río Ebro; Barcelona, Girona,

Granollers y Terrassa, son geográficamente más distantes. Entre las poblaciones seleccionadas, tres de ellas son capitales de provincia (Barcelona, Tarragona y Girona) y tres son capitales de comarca (Amposta, Granollers, Terrassa). Las poblaciones se diferencian, entre otras razones, por su población, siendo Amposta la menos poblada (21.558 habitantes), seguida de Granollers (60.000 habitantes) y Girona (96.722 habitantes). Barcelona es la ciudad más poblada (1.619.337 habitantes), mientras que Tarragona (130.323 habitantes) y Terrassa (212.724 habitantes), tienen una población intermedia.

Participantes

Como es bien sabido, la representatividad estadística no es una cuestión relevante en las investigaciones basadas en una aproximación cualitativa. En este trabajo se empleó un muestreo propositivo (Vaughn, Schumm & Sinagub, 1996), que asegura la necesaria diversidad de los participantes y que nos proporciona una muestra estructurada antes que aleatoria. En este sentido, se desarrolló una estrategia de muestreo basada en el tema a tratar. Básicamente, se procuró asegurar que entre las personas participantes hubiera diferentes procedencias geográficas, así como diferentes percepciones del tema en cuestión. Se procuró, también, que las personas participantes en un grupo de discusión no se conocieran previamente.

Se contó con la participación de un total de 45 personas. Cada grupo contó con un promedio de 8 participantes. La mayor parte eran jóvenes y adultos, con una edad promedio de 44 años. Todos eran de nacionalidad española. Su distribución en los diferentes grupos obedecía a su lugar de residencia habitual. Los participantes tenían perfiles ocupacionales diversos, con lo que se contó con la presencia de estudiantes

universitarios, profesores e investigadores, funcionarios públicos, psicólogos, empleados del sector bancario, empleados del tercer sector, médicos, ingenieros, periodistas, trabajadores del hogar, vendedores, jubilados y personas en paro. La mayor parte de los asistentes no manifestaba ningún conocimiento especializado en la temática (salvo algunos miembros de grupos concernidos o voluntarios en programas ambientales). De ellos no se esperaba un posicionamiento experto. Su saber espontáneo sobre los problemas del agua en España era suficiente para participar. El hecho de que las movilizaciones contra el trasvase del Ebro fueran cercanas hacía de la cuestión un tema de conversación reconocible para todos ellos.

Procedimiento

Al principio de cada grupo se presentaban dos anuncios de periódico que manifestaban posiciones distintas respecto al trasvase del Ebro. A partir de las primeras intervenciones, la conversación fluía de manera espontánea. Con el fin de orientarla hacia los objetivos de la investigación, el moderador manifestaba su interés por conocer la opinión de los asistentes sobre temas como el papel de expertos, políticos y ciudadanos en la controversia, las distintas formas de participación de la sociedad civil, o los medios a través de los cuales las personas se informan sobre el debate. Aunque ninguna de las preguntas formuladas por el moderador apuntaba intencionalmente a la identidad espacial, pronto resultó evidente que la adscripción territorial era un recurso invocado para articular opiniones al respecto de las controversias sobre el agua.

El desarrollo de las discusiones se grabó en audio con la autorización de los participantes. La información recolectada se sometió a una transcripción basada en el contenido. Las transcripciones fueron leídas repetida e independientemente por todos

los investigadores con el objetivo de identificar referencias espaciales explícitas. Las referencias encontradas se introdujeron en un fichero informático, ordenadas en un continuo que iba desde las de orden general (supraordenadas) a las menos inclusivas (subordinadas). Cada denominación espacial encontrada se introducía en el fichero junto con los turnos anteriores o posteriores. Con los datos así organizados, fue posible 1) encontrar las referencias más utilizadas en nuestros grupos, 2) centrar el análisis en tales referencias y 3) recuperar, para cada una, su contexto más inmediato de enunciación.

Resultados

A partir del tratamiento de los datos, se encontraron 71 tipos de referencias espaciales empleadas en los grupos de discusión. Fueron identificadas tanto divisiones administrativas (nombres de países o ciudades), como nombres de zonas y territorios (como “Tierras del Ebro”²), y lugares genéricos como “casa” o “campo de golf”. Cada uno de estos tipos de referencias espaciales incluye diferentes denominaciones que pueden organizarse jerárquicamente, siguiendo una lógica concéntrica (Shegloff, 1972). Una representación formal de dicha organización puede verse en la Figura 1. Allí se muestra una versión simplificada de las principales jerarquías que pueden confeccionarse con los datos. Dos de ellas son taxonomías del tipo todo-parte (*partonomies*, en términos de Bilmes, 2009) y son identificables por sus relaciones en líneas continuas. La primera organiza las divisiones administrativas (con “Europa” como categoría superordenada); la otra hace lo propio con tipos de áreas geográficas (con “país” a la cabeza). La tercera es una taxonomía de inclusión cuyas relaciones se

2 Se denomina “Tierras del Ebro” a un conjunto de comarcas ubicadas al sur de Cataluña y que tienen en común el paso del curso bajo del río Ebro por su territorio.

representan con líneas punteadas, indicando por ejemplo tipos de países o de comunidades autónomas.

Estas taxonomías formalizan la ecología del sentido común rastreada. Como puede apreciarse, la misma incluye denominaciones muy variadas. Con el fin de reconocer tal riqueza, y en la línea de otros trabajos que apuntan la naturaleza multinivel de la identidad espacial (Altman & Low, 1992; Hidalgo & Hernández, 2001; Lalli, 1992), nuestro análisis no se limitó a examinar el uso discursivo de las referencias “urbanas”. Esto implicó que el “barrio”, la “zona” y la “ciudad” perdieran la importancia que les otorgan Valera y Pol (1994). A continuación, se ofrece una interpretación del uso discursivo de referencias con mayor nivel de generalidad. Nos centramos en tres de las empleadas con mayor frecuencia: “España”, “Cataluña” y “Valencia”. El examen de otros topónimos y etiquetas recurrentes como “país”, “Tarragona”, “Tierras del Ebro”, y “campos de golf” se pospone para posteriores trabajos.

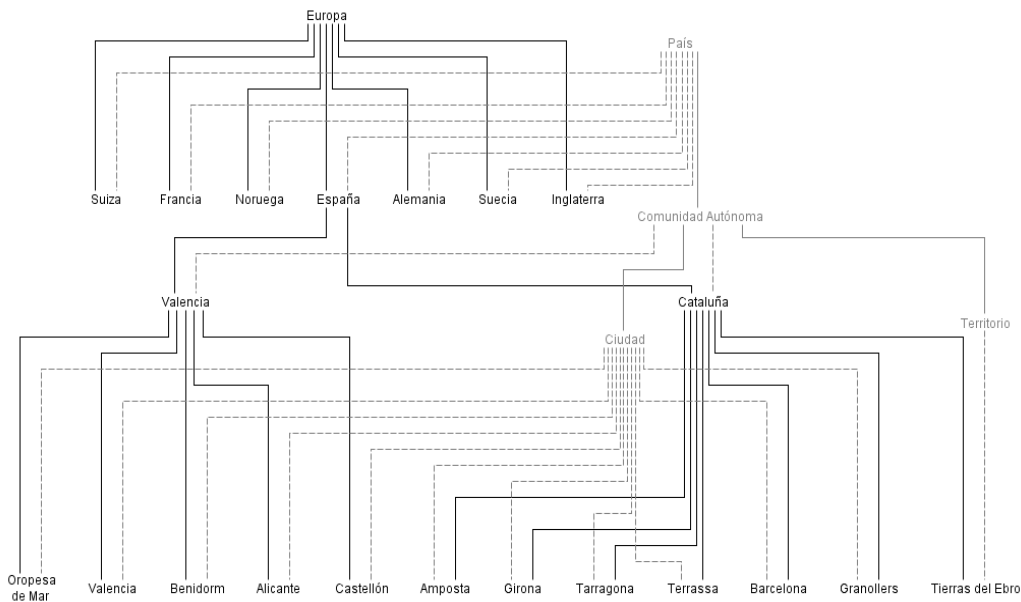


Figura 1. Organización de los datos en jerarquías, versión simplificada. Fuente: Elaboración propia.

Análisis

España: Territorio, población y gobierno en déficit

(...) ahora hablemos a nivel de país. España, ¿eh? Tenemos un, un problema de agua. (Granollers, H1.16)

Dentro de la taxonomía de divisiones administrativas que hemos construido a partir de los datos, “España” ocupa un lugar intermedio. Sin embargo, en la práctica discursiva opera como una categoría superordenada o, más exactamente, como un dispositivo de membresía. Al activar la referencia a “España” los participantes movilizan un dispositivo de categorización por localización (McHoul & Watson, 1984) que *define la situación* sobre la que conversan y vuelve reconocibles una serie de “problemas del agua”, particularmente referidos a la escasez del recurso. Esto se logra vinculando a “España” predicados como “árido” o “seco”, y utilizando tales predicados en comparaciones entre “España” y otros países europeos de los que se dice que gozan de lluvias abundantes (Granollers, H1.7) y de una gran cantidad de recursos hídricos (Amposta, H3.15), así como entre la llamada “España seca” (al sur y al este) y una “España húmeda” (al noroeste). Es a través de este tipo de caracterizaciones y comparaciones que “España” se vuelve una categoría relevante para hablar de los “problemas del agua”. El siguiente fragmento es un ejemplo de cómo ocurre en los grupos de discusión.

Fragmento 1, Granollers

- 1 H2: O uno se hace una piscina a 200 metros del mar y mientras
- 2 se está bañando en su piscina dices, mira, alguno está
- 3 cerrando el grifo mientras se asea. Con lo práctico que es
- 4 con el grifo abierto.

- 5 M2: Sí.
6 H1: Y las urbanizaciones que tenemos aquí, en un país que no
7 tiene césped.
8 M2: ¡Ah, sí! El césped, ¡sí!
9 H1: En el ayuntamiento se hace una superficie de césped y
10 estamos todos contentísimos de que tengan césped, pero no
11 es zona de césped. Los ingleses o el norte de España, que
12 tienen lluvia constantemente [...] pero nosotros aquí...
13 M2: Sí, la lluvia esta constante...
14 H1: Sí, la lluvia esta constante, pero nosotros aquí...
15 M2: Piedritas de estas de toda la vida.

Este fragmento forma parte de una secuencia en la que los participantes examinan colectivamente los usos del agua en distintos lugares. Al hacerlo están asignando valores a determinadas actividades. Controlar el gasto doméstico de agua, aunque es poco “práctico” (línea 3), es preferible a tener “una piscina a 200 metros del mar” (línea 1). Dicha preferencia se sostiene sobre un diagnóstico común de la situación: “España”, en comparación con “Inglaterra”, es un territorio con un déficit hídrico, es un territorio “seco” (como lo es el sur de España, en comparación con el norte). Este marco de escasez hace aceptables determinados usos del agua, mientras que vuelve reprobables otros. Así pues, el dispositivo no simplemente dibuja un estado de cosas, sino que permite a los hablantes derivar cursos de acción válidos o inválidos. Sugiere cómo debe comportarse una población dada (“nosotros aquí”, en la línea 14).

En tanto que dispositivo de categorización, “España” –y más concretamente “España seca”–, tiene asociadas unas categorías y unas actividades. Adicionalmente, sirve para agrupar e identificar a una o varias poblaciones. Un examen de los usos del agua consistentes o inconsistentes con la “España seca” puede ayudarnos a identificar dichas poblaciones. La construcción de “superficies de césped” (suponemos, más allá de ciertos límites) o de “una piscina a 200 metros del mar” serían ejemplos de

actividades inconsistentes con la “España seca”; mientras que construir superficies cubiertas de grava (las “piedritas de toda la vida”) y controlar el uso doméstico del recurso serían consistentes. Dichas acciones son imputables a los “consumidores” o “usuarios finales” y a las “administraciones” o “Gobiernos”. Tales grupos están convencionalmente vinculados en el discurso: son pares normalmente relacionados (Silverman, 1998). Para clarificar el tipo de relación que se les adjudica, podemos examinar el fragmento 2.

Fragmento 2, Terrassa

- 1 *H1:* También hay otra cuestión que es el ciudadano no tiene una
- 2 cultura del ahorro. El agua siempre se ha visto como una cosa
- 3 que cuesta poco, ¿no? (...) Ahora ya se habla de desalinizar y
- 4 de que el uso abusivo se debe penalizar.
- 5 *M1:* Porque los recibos están subiendo (...) yo tengo recibos que se
- 6 han triplicado.
- 7 *H1:* Aquí el consumidor paga el agua 5 veces más cara que en
- 8 Murcia.
- 9 *M1:* Pero es que pagamos todo más caro que en Murcia.
- 10 *H2:* En cambio el IPC [Índice de Precios al Consumidor] que
- 11 pagamos es el mismo (...) Pero yo como consumidor, por
- 12 ejemplo, pues puede ser que haya gente que en el lavabo, en
- 13 el depósito del lavabo, pues tienen una botella y unas cosas
- 14 que venden para que no se tenga que tirar siempre de la
- 15 cadena o toda la cisterna. Pues eso muy poca gente lo tiene
- 16 en este momento: tira la cadena y si luego el otro vuelve a
- 17 tirar la cadena, y vuelve a tirar la cadena...
- 18 *M1:* ... y cuando nos duchamos, abrimos el grifo para que se vaya
- 19 calentando y te estás quitando la ropa antes de meterte, y así
- 20 la mayoría de la gente.
- 21 *H2:* Ni menos, ni más. Pues eso es una falta de cultura de agua
- 22 que ya en la escuela, desde pequeños, ya se nos debería
- 23 enseñar, y los padres deberían comenzar a pensar que a la
- 24 larga no tendremos agua ni para beber, ¿no? Esta pedagogía
- 25 del ahorro del agua tampoco se ha hecho un plan nacional. El
- 26 Gobierno tampoco se ha preocupado de concienciar las
- 27 diferentes instituciones educativas, familiares y tal.

En el fragmento 2, los hablantes conversan sobre lo que el primero de ellos denomina la “cultura del ahorro”. Aunque dentro de dicha conversación se inserta una secuencia sobre el costo del recurso (líneas 3 a 11), de lo que se trata es de describir la posición de los españoles ante los “problemas del agua”. El primer hablante (H1) deja claro que “el ciudadano no tiene una cultura del ahorro”. A dicha formulación le sigue una exculpación. El despilfarrador de agua se construye como un personaje nuevo en la sociedad española. Solo en tiempos recientes se ha vuelto un problema: lo es “ahora” porque el agua se ha convertido en un asunto de interés público (“se habla de desalinizar”) y porque la penalización de su comportamiento “abusivo” se plantea en la actualidad.

La caracterización del ciudadano español como una persona “sin cultura de ahorro” es apoyada por los demás hablantes. H2 sostiene que “muy poca gente” usa tecnologías ahorradoras; mientras que M1 afirma que “la mayoría de la gente” no controla su consumo doméstico. La exculpación del “consumidor” también es co-producida. Esto es particularmente claro en el último turno de H2 en el que se explica la falta de “cultura de ahorro” por la ausencia de un “plan nacional” que implemente una “pedagogía del ahorro”. El par consumidor, Gobierno, es especialmente visible aquí. Si los ciudadanos españoles actúan de manera ineficiente en la “España seca” es porque el “Gobierno” no regula su conducta. Dicha situación es valorada implícitamente como inapropiada; es decir, como una desviación de las actividades asociadas a la categoría “Gobierno”, del que se espera un papel activo en los asuntos de interés público.

Como lo enuncia uno de los participantes del grupo de Terrassa: “(...) estamos siempre en una visión de país en la que todo tiene que surgir de la administración” (Terrassa, H2.18). Sin embargo, para el caso de la “pedagogía del ahorro”, el papel activo del “Gobierno” no termina por desplegarse y, en consecuencia, se justifica que los “ciudadanos” asuman un papel pasivo en el control del gasto de agua. El comportamiento de los segundos aparece como determinado por la acción de los primeros. Al formularse de esta manera, el par gobierno-consumidores complementa en el campo sociopolítico lo que en principio se había descrito como una interpretación de la situación hidrológica. Los “problemas del agua” no tienen solo la “aridez” de “España” por fundamento, sino la pasividad de la población. “España” es entonces, en el contexto de los fragmentos examinados, un dispositivo con el que se puede dar cuenta de un triple déficit: el de un territorio “seco” (línea 24), el de un Gobierno desinteresado por el control de la demanda (línea 25) y el de un conjunto de usuarios “no concienciados” (línea 26).

En resumen, movilizar la categoría “España” en el contexto de conversaciones sobre las controversias hídricas permite a los hablantes: 1) definir una situación problemática, 2) ubicar a una población en el marco de dicha situación y 3) delimitar acciones aceptables o inaceptables para esta población. Las dos últimas acciones discursivas, en tanto que movilizan categorías grupales y hacen imputables ciertos derechos y obligaciones, son las más directamente implicadas en procesos de identificación. Pero las identidades resultantes son al mismo tiempo sociales (referidas a grupos humanos como el “Gobierno” o los “consumidores”) y espaciales (delimitadas geográficamente por su membresía a “España”); son identidades híbridas (Darier &

Tàbara, 2006). No se trata de gobiernos o consumidores en general, sino de las administraciones y los usuarios “españoles”. Así pues, para reconocer y describir los “problemas del agua”, los hablantes no solo movilizan una geografía o una sociología profana, sino una *geografía política del sentido común*. Para profundizar en cómo dicha geografía política profana sirve a los hablantes para dar sentido a situaciones dilemáticas –como los “problemas del agua”–, se examina a continuación el uso que hacen de las denominaciones “Cataluña” y “Valencia”.

“Cataluña” vs. “Valencia”: La geografía política profana de un conflicto

(...) Si los valencianos vienen y nos lo colocan, nosotros como catalanes nos defenderemos, ¿no? (Granollers, H2.4)

Apelar a una geografía política del sentido común puede ser de utilidad para ofrecer una comprensión más social de la identidad espacial. Lo es en la medida en que se entienda, no como un conjunto de cogniciones relativamente organizadas en la interioridad del sujeto, sino como una forma de conocimiento en acción (Housley & Fitzgerald, 2002) con el que se otorga colectivamente significado a, y se da cuenta de, los “problemas del agua”. En este sentido, se propone entender dicha geografía mundana como un conjunto de recursos interpretativos empleados por los hablantes para organizar socialmente el espacio (Housley & Smith, 2011), y que se expresan a través de un conjunto de formulaciones socio-político-espaciales efectivamente activadas y movilizadas en el lenguaje en uso.

En un trabajo sobre las audiencias públicas a propósito de la violencia en Irlanda del Norte, en 1969, Drew (1978) documenta cómo los testigos producen un recuento de los acontecimientos con atención a la distribución de los grupos religiosos en el

espacio. Tal “organización religiosa de la geografía de Belfast” (p. 4) no es inocente, afirma el autor, sino que forma parte de los métodos a través de los cuales es posible formular acusaciones. La geografía mundana que hemos encontrado en nuestros datos se presta para una lectura similar. La invocación interactiva de determinados dispositivos y categorías espaciales sirve para dar cuenta de la distribución de las posiciones políticas en las controversias sobre el agua, así como para juzgar la conducta de determinadas poblaciones. La forma como los hablantes construyen, hablan del “conflicto entre comunidades autónomas”, es particularmente ilustrativa a este respecto.

Las comunidades autónomas son entidades territoriales recogidas en la Constitución Española de 1978. Desde 1995, el Estado español se divide política y administrativamente en diecisiete comunidades autónomas con sus propios órganos de gobierno, instituciones representativas y competencias ejecutivas. En los grupos focales se hizo mención de algunas de ellas: Andalucía, Aragón, Castilla-La Mancha, Cataluña, Islas Baleares, Murcia y Valencia. Aunque todas son útiles para hablar sobre los “problemas del agua”, Cataluña y Valencia sobresalen por ser las más utilizadas. Los dos tienen un papel central en la comprensión social de las controversias sobre el agua, ya que permiten a los hablantes la producción de opiniones reconocibles y aceptables en el contexto de realización de los grupos de discusión. En dichas opiniones, los contenciosos se reducen a un enfrentamiento entre dos entidades discretas: “Valencia está diciendo [trasvase del] agua sí, y Cataluña y Aragón dicen agua no” (Granollers, N2.19). Más adelante se volverá sobre el particular, resaltando una forma de problematizar dicha simplificación. En esta sección interesa resaltar cómo la

movilización de “Cataluña” y “Valencia” facilita la toma de posición en asunto cuyos detalles técnicos son de alta complejidad. Para tal fin, se examina el fragmento 3, un extracto monológico que aparece como respuesta a una conversación sobre la política de aguas.

Fragmento 3, Girona

1 H2: A pesar de lo que decíamos no pierdo la esperanza. Mira, ayer
 2 veía un acto que me parece una tontería integral, que es decidir
 3 quién es el catalán o la catalana del año (...) Iba mirando así, de
 4 reojo, y dije: bueno, aún es un pueblo sano (...) Un pueblo que
 5 reconoce las trayectorias personales, la lucha personal, el
 6 esfuerzo. Por tanto, dije, no desconfío más de nosotros mismos,
 7 ¿no? (...) Además va a echar un discurso diciendo: este premio
 8 no lo recojo en nombre propio, sino que lo recojo en recuerdo
 9 de todos los hombres y mujeres que lucharon por la República.
 10 (...) Y bueno, eso, que yo creo que la gente tenemos mucho que
 11 decir, ¿no? Y que encontraremos maneras y que no somos tan
 12 tontos como a veces los que nos gestionan se piensan. Y creo
 13 que hay diferencias de percepción... a nivel español creo que se
 14 hace un tipo de política que no congenia mucho, por lo que sea
 15 ¿eh? Historia, diferentes grupos, maneras de entender el
 16 territorio, la sociedad que hay en Cataluña. Yo creo que es muy
 17 diferente y eso a veces provoca dicotomías.

Con anterioridad a este fragmento, los hablantes articulan su desconfianza ante los expertos y políticos que participan en la gestión del agua en España. H2 se posiciona frente a tal opinión, desvinculando a la población catalana (“un pueblo sano”, línea 4) del comportamiento de las administraciones (“los que nos gestionan”, línea 12). En su intervención “Cataluña” cobra sentido dentro del dispositivo “España”, por oposición al “tipo de política” (línea 14) desarrollada a nivel estatal. La alusión a la “catalana del año” que dedica el galardón a quienes “lucharon por la República” sirve de antesala a dicha caracterización. Al enmarcar su intervención con esta referencia, la orientación política se activa como un criterio para distinguir entre “Cataluña” y “España”.

Concretamente, el republicanismo de izquierdas queda asociado a “Cataluña”, mientras que la derecha política queda implícitamente vinculada a “España”³.

Este sencillo mapa político no solamente distingue a “Cataluña” de “España”. A la distribución espacial de diferentes “formas de hacer política” se atribuye la “generación de dicotomías” (línea, 17). Esta formulación se aplica en el fragmento a “España”, pero también puede servir para hablar de otras categorías espaciales agrupables bajo dicho dispositivo de membresía. El distanciamiento político entre los catalanes y otras comunidades autónomas suele construirse alrededor de lo que los hablantes llaman “anti-catalanismo”. Se trata de una acción emprendida por miembros de otras categorías del mismo nivel de generalización consistente en describir a los “catalanes” con predicados del tipo “egoístas” (Barcelona, N1.3), “bordes” (Girona, N2.5) o “insolidarios” (Amposta, D3.5). La categoría “Valencia” fue una de aquellas a las que los interlocutores atribuyeron tal anti-catalanismo.

La construcción que los hablantes hacen de la referencia a “Valencia” se asemeja a la que hemos descrito a propósito de la “España seca”. Los participantes caracterizan a “Valencia” por su “clima seco” (Granollers, H3.14) que le da al territorio el aspecto de un “desierto total” (Granollers, H3.15). Mientras que en “Cataluña” reconocen el paso del río Ebro, los hablantes llaman la atención sobre el carácter deficitario de los ríos

3 Este fenómeno se puede interpretar como la generación discursiva de distintividad para la categoría “Cataluña”. En otros grupos de discusión, dicho proceso se aprecia en relación con los temas hidrológicos cuando se llama la atención sobre el enlace entre la identidad catalana y el río Ebro. Su paso por “Cataluña” es valorado por los hablantes como un fenómeno positivo (Granollers, H4.16), articulador de las llamadas “Tierras del Ebro” (Amposta, D3.31). Adicionalmente, los participantes describen su comunidad autónoma como un lugar donde se hace un mejor uso del agua que en otros territorios: “Hay lugares, no aquí en Cataluña, (...) que hay más piscinas que pueblo” (Granollers, H2.8). Se distancian así de la falta de “cultura de ahorro” que atribuyen al resto de “españoles”; se distinguen de ellos resaltando los atributos positivos de su categoría y estableciendo el Ebro como objeto de mutua identificación.

alóctonos de la vecina comunidad autónoma “el Júcar, que es el río del País Valenciano llega, pues, prácticamente sin agua” (Terrassa, H1.2), así como sobre el peligro que corren sus ecosistemas acuáticos “La albufera desaparecerá, porque el agua la están chupando en Castilla-La Mancha” (Terrassa, H1.3). Aunque “Cataluña” forma parte de la “España seca”, con respecto a “Valencia” se presenta como más privilegiada en términos hidrológicos. Este contraste entre lo seco/ajeno y lo húmedo/propio ha sido documentado por Mairal (1993) como una forma que tienen los afectados por infraestructuras hidráulicas de expresar el apego a la propia tierra. Aquí aparece como una estrategia discursiva que sirve para dibujar un contexto político, de conflicto intergrupal, y para asumir una posición a favor de una categoría de la que los hablantes son miembros: “Cataluña”.

El contencioso entre “Cataluña” y “Valencia” se co-produce discursivamente en los grupos de discusión a través de conversaciones sobre el Plan Hidrológico Nacional: “Este plan hidrológico”, dice uno de los participantes, “es un intento de enfrentar Cataluña con el País Valenciano” (Terrassa, H1.3). El enfrentamiento tendría como eje el trasvase del río Ebro apoyado por “Valencia” y rechazado por “Cataluña” y estaría originado por los usos del recurso que se dan en el territorio valenciano: “Es como se gestiona el agua en Valencia lo que lleva a estos conflictos” (Girona, N2.2). El significado de dicha gestión se construye con referencias a un conjunto de actividades “insostenibles” asociadas: la construcción desmedida de complejos turísticos (Amposta, H3.14, Tarragona, H2.9), “campos de golf” (Barcelona, M2.3, Barcelona, H1.4, Tarragona, M4.6), “bloques de pisos” (Granollers, H2.1), “rascacielos” (Granollers, H4.18) o “segundas residencias” (Barcelona, D2.3; Granollers, H2.18). En otras

palabras, los “problemas del agua” en los que están implicados “Cataluña” y “Valencia” no se atribuyen solo a las condiciones ambientales, sino además (y en ocasiones, exclusivamente) al comportamiento del “Gobierno” valenciano. En la siguiente sección se profundiza en la manera como dicha atribución ayuda a los hablantes a comprender la identidad espacial valenciana, interpretando el “enfrentamiento entre comunidades” en el producto de una maquinación política.

Las identidades espaciales como herramienta política

(...) con la Generalitat Valenciana está clarísimo: es demagogia política, ¿no? Es un poco más la historia de (...) la utilización, en este caso, del recurso del agua (...) como enfrentamiento entre comunidades.
(Barcelona, N1.1)

En los grupos de discusión examinados, los hablantes co-producen discursivamente los conflictos sobre el agua en términos que para ellos son reconocibles. Para hacerlo, despliegan elementos de lo que hemos llamado la geografía política del sentido común; esto es, conocimientos compartidos sobre las interacciones entre el territorio y sus formas de ordenamiento. Dicho ordenamiento puede ser caracterizado de muchas maneras. En los fragmentos analizados, los hablantes producen sus opiniones utilizando referencias de orden político. En esta sección se profundiza en una de las implicaciones de esta forma de hacer reconocibles los “problemas del agua” en España: la formulación de las controversias hídricas como situaciones conflictivas. Para tal efecto, se examina el siguiente fragmento.

Fragmento 4, Granollers

- 1 H2: Yo básicamente porque tengo poca información, pero
 2 básicamente yo supongo que es montar un canal aquí (...) y
 3 llevarlo para allá. Y lo que he escuchado (...) por los medios y
 4 tal es que (...) si el Ebro está vacío, ¿no? No agarramos agua.
 5 O sea, solo coger agua si hay agua [en el Ebro]. Yo eso por
 6 mucho que me lo expliquen, no me lo creo. Porque he visto
 7 ejemplos de que no lo hacen. O sea, si les dejás harán lo que
 8 quieran (...)
- 9 M2: Pero a mí lo que me da rabia...
- 10 H2: ... harán lo que quieran...
- 11 M2: ... es que han conseguido lo que querían, que era politizar el
 12 tema.
- 13 H2: ¡Sí!
- 14 M2: Porque usted mismo acaba de decir, si les dejás poner...
- 15 H2: Sí
- 16 M2: ... como una cuestión política, es decir, si los valencianos
 17 llegan y nos lo colocan, nosotros como catalanes nos
 18 defenderemos, ¿no? Ya van al tema este, ¿no? Valencia,
 19 Cataluña, Cataluña, Valencia.

En este fragmento los “problemas del agua” aparecen como una “cuestión política”. Esto ocurre en al menos dos sentidos. En primer lugar, presentando el trasvase del Ebro (“montar un canal aquí”, línea 2) como una acción asociada a los políticos (líneas 6-8). En segunda instancia, hablando del enfrentamiento entre “Valencia” y “Cataluña” como el producto de una “politización” (líneas 11-12). Ambas cuestiones están relacionadas: M2 produce su opinión sobre la “politización” de los contenciosos hídricos tomando como punto de partida la descripción que H2 hace del comportamiento esperable de los políticos “valencianos” (línea 14). El conflicto entre comunidades autónomas queda entonces planteado como parte de los esfuerzos que los “políticos” realizan para configurar un determinado estado de cosas, delimitar las acciones posibles y asignar responsabilidades (“si los valencianos llegan y nos lo colocan, nosotros como catalanes nos defenderemos”, líneas 16-18).

Como hemos visto en este trabajo, tal forma de emplear las identidades espaciales no es una actividad exclusiva de quienes ocupan posiciones de poder. Los mismos hablantes participan de esta “politización”. Al visibilizar la dimensión a la vez geográfica y política de la identidad, los hablantes hacen también política identitaria; esto es, construyen los asuntos hídricos como cuestiones problemáticas y conflictivas, donde distintos grupos se adjudican a sí mismos, y le asignan a otros, determinadas categorías asociadas a ciertos derechos y obligaciones. La movilización de referencias a las comunidades autónomas sirve en este sentido para darle forma a un contencioso 1) delimitando la propia pertenencia grupal de los hablantes, 2) distinguiéndolos de otros grupos, 3) haciendo reconocible un conflicto entre las poblaciones territorialmente definidas y 4) relativizando la base misma de dicho conflicto, esto es, denunciando la “manipulación” estratégica de las categorías espaciales.

La “manipulación” estratégica de la identidad espacial es un tema central en la geografía política del sentido común. En los grupos de discusión aparece en repetidas ocasiones como una forma de dar cuenta de la dimensión política de las categorías espaciales. Si bien esto puede ocurrir tanto para el caso de “Cataluña” como para el de “Valencia”, las referencias a dicha “manipulación” revelan una posición a favor del grupo propio y se asocian con más frecuencia al exogrupo. Un participante del grupo de discusión de Barcelona expresa con especial claridad dicha adscripción cuando describe la situación de los “valencianos” así: “...hay gente que realmente, o sea, la ignorancia es absoluta y han llegado a ir a manifestaciones convocadas en Valencia, pagadas por la Generalitat Valenciana con dinero público (...) defendiendo lo que es el agua del río. Eso es vergonzoso porque realmente de lo que se trata es de una

manipulación de todo un tema” (Barcelona, N1.3). Aparece aquí de nuevo el par Gobierno-usuarios con el que los “valencianos” son caracterizados como actores ingenuos, movilizados por motivos que no son los suyos propios. Su participación en manifestaciones a favor del trasvase del Ebro tiene como origen la acción de “los políticos” y, específicamente, la “Generalitat Valenciana”.

Las referencias al uso estratégico del par Cataluña-Valencia es parte de los métodos a través de los cuales los hablantes dibujan los contornos políticos de los “problemas del agua”. A través de dicha práctica, dan cuenta de las identidades espaciales como logros o productos sociales. Así pues, en los grupos de discusión los participantes no solamente vuelven relevantes ciertas categorías, sino que pueden llegar a reconocer su carácter artificial e, incluso, artificioso. Por esta vía, llaman la atención sobre el papel que cumple la identidad en las luchas históricas entre grupos (Reicher, 1996) y sobre la dimensión política que tienen dichas luchas. Profundizar en esta cuestión, poco explorada en la literatura sobre identidad espacial (Dixon & Durrheim, 2000), puede abrir vías de estudio en el futuro.

Conclusiones

Con el objetivo de acercarnos a cómo los ciudadanos catalanes dan cuenta de las controversias hídricas en España, en este artículo se han analizado seis grupos de discusión realizados en Cataluña (España). Una primera aproximación a los datos ha permitido rastrear un conjunto de denominaciones espaciales que los participantes utilizan cuando hablan sobre los “problemas del agua”. El análisis se ha centrado en las tres categorías más frecuentemente utilizadas: “España”, “Cataluña” y “Valencia”. Estas etiquetas se han interpretado como herramientas discursivas (dispositivos y categorías

de membresía) con las que los hablantes co-producen identidades espaciales reconocibles a través de la lengua en uso.

El análisis indica que los participantes movilizan las denominaciones “España”, “Cataluña” y “Valencia” para llevar a cabo diferentes acciones discursivas. Una de ellas tiene que ver con la identificación de poblaciones cuyas actividades se consideran relevantes para abordar y entender los “problemas del agua”. Dichas poblaciones han aparecido en la forma de dos diferentes pares normalmente relacionados. Uno de ellos está integrado por el “Gobierno” y los “usuarios finales”, e implica un vínculo de dependencia del segundo grupo con respecto del primero. El otro par está compuesto por dos comunidades autónomas enfrentadas por el trasvase del Ebro, y se describe como el resultado de una maquinación urdida para favorecer intereses económicos y partidistas.

La activación de las dos parejas antes mencionadas construye los “problemas del agua” como asuntos políticos además de geográficos, y lo hace con atención a conocimientos socialmente disponibles sobre las condiciones territoriales y las relaciones de fuerza que participan de su ordenamiento. Es en este sentido, se sugiere que los participantes del presente estudio vuelven reconocibles las controversias sobre el agua, empleando lo que se ha denominado “geografía política del sentido común”. Dicha forma de conocimiento profano en acción implica el empleo de categorías, descriptores y predicados coherentes con el tema de discusión; pero, además, supone la constitución misma del tema en cuestión (Shegloff, 1972). Al hablar de “España”, “Cataluña” y “Valencia”, los participantes en este estudio abordan los “problemas del agua” como fenómenos que trascienden el estado de cosas dado por las condiciones

ambientales y los dibujan como escenarios de enfrentamientos y alianzas entre grupos con determinados intereses. Así pues, las identidades espaciales aparecen como herramientas discursivas con las que las personas co-producen los “problemas del agua” como asuntos socioespacialmente conflictivos.

La identificación de esta geografía política del sentido común puede abrir la oportunidad para al menos tres agendas de investigación futura. La primera de ellas consiste en avanzar en la comprensión social y discursiva de la identidad espacial en la interpretación que las personas hacen de las controversias tecnocientíficas públicas. La metodología empleada en este artículo u otras como las utilizadas desde la psicología discursiva (Dixon & Durrheim, 2000) o el análisis narrativo (Taylor, 2003) puede resultar de suma utilidad para comprender las identidades espaciales como producto de lo que Valera y Pol (1994) llaman “relaciones dialogantes”. El uso de un enfoque cualitativo como el que se propone ha demostrado ser de utilidad para acercarse al empleo que las personas hacen de las categorías identitarias y a su significado en contexto de intercambios sobre temas de interés común. De esta manera puede ofrecer un punto de vista más cercano al sentido que los protagonistas dan a sus discursos y a sus realidades. Así mismo, los datos pueden desplegarse con un mayor grado de libertad, sin que los analistas definan de antemano su contenido y estructura.

En segundo lugar, la forma como los dispositivos y categorías espaciales son usados por los participantes en los grupos de discusión sugiere que tales recursos tienen una dimensión política muy marcada. Recientemente, Dixon y Durrheim (2000) han llamado la atención sobre la necesidad de profundizar en dicha dimensión de la identidad de lugar. Una posible vía para trabajar en esta dirección consiste en indagar

por las conexiones entre las categorías espaciales y marcos interpretativos con los que las personas diagnostican la realidad, realizan pronósticos y motivan a otros a actuar (Gamson, Fireman & Rytina, 1982; Show & Benford, 1988). En este sentido, los analistas de marcos han defendido el papel central que la identidad cumple en la identificación e intervención de problemáticas sociales (Hunt, Benford & Snow, 2001). A partir del análisis que se ha presentado aquí, es factible afirmar que la construcción del par Gobierno-consumidores asigna a los “ciudadanos” una identidad poco proclive a la movilización. Sin embargo, participa en la emergencia de “identidades colectivas politizadas” (ver, Sabucedo, Durán & Alzate, 2010) desde las que se denuncian situaciones de pasividad, de despilfarro y de manipulación.

Finalmente, el análisis de los datos puede leerse a la luz de lo que Darier y Tàbara (2006) llaman “categorías híbridas”, esto es, formas de identidad que rompen con la separación entre lo “natural” y lo “social”. Los autores utilizan los Estudios Sociales de la Ciencia y la Tecnología, y particularmente la Teoría del Actor Red, para abordar la identidad nacional como un conjunto heterogéneo constituido por naciones sin estado (como Cataluña y Quebec) y las montañas que “resuenan” en su “identidad nacional”. En la misma dirección ha trabajado Michael (2000, 2004) a partir de la generación de “nuevos nombres heterogéneos” –denominados co(a)gentes– con los que revela procesos de hibridación identitaria (por ejemplo, entre los excursionistas y los entornos naturales que visitan). Este tipo de aproximación está empezando a utilizarse con éxito en los estudios urbanos (ver, Farías & Bender, 2010), y podría inaugurar un nuevo “giro” en el estudio de la identidad espacial, que vaya más allá del discurso y proponga una mirada semiótico-material del fenómeno.

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Chapter 3

Link Economy

The demonstrable value of link-related logics for establishing topic source authority provides some way towards grappling with the 'rumour mill', as far as basic Web epistemology is concerned. Indeed separating the wheat from the chaff has long been the key issue for both engines (ranking) and surfers (searching), desiring to find the 'real' source. The 'chaos' of the Internet (to use the vernacular) may be viewed as a product of the lack of source authority, in an information free-for-all brought about by 800,000 pages with something to say about Harvard, all being listed by engines, returning sites with frequent Harvard key words and Harvard metatags (...). Whenever the query relates not to an institution but to an issue, epistemological competition becomes even greater. Taking an example from our research, well over one million pages have something to say about 'climate change'. Since there is no such thing as the 'real climate change site', the challenge concerns locating and querying not the one real source but the 'discourse'. Here the issue revolves around using organizational linking logics in order to reliably author the discourse, and be able to query it for positionings and positions in a debate. In a variation on the English parliamentary expression, where you stand depends on where you're positioned.

*Rogers (2002)
Operating Issue Networks on the Web*

Section 3.1.

The ‘New Water Culture’ on the Web: an issue network analysis

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The ‘New Water Culture’ on the Web: an issue network analysis

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Abstract In this article, we analyse how the Internet is used to bring visibility to water affairs. We focus on the way different organisations exploit the Web in order to participate in the debates about water policy in Spain and to define the topics concerned. To do this, we have drawn up an issue network articulated around an alternative and sustainable water policy called ‘New Water Culture’. We examine the composition of this web structure, its hyper-linking styles, key nodes and political trajectories. The outcomes indicate that the ‘New Water Culture’ has become a main frame in Spanish environmental policy. Supported both by governmental and non-governmental players, the ‘New Water Culture’ struggles between two opposing trends: its expulsion from the public sphere and efforts to open it up to scrutiny from political outsiders.

Keywords World Wide Web · Issue network · Public debates · New Water Culture

Introduction

Serious water problems have plagued Spain in the past and continue to do so today. Seasonal and yearly rainfall

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variation causes drought to be more frequent in areas with a Mediterranean climate. In April 2007, the Government of Catalonia passed a decree of emergency measures to manage water resources as a preventative action against a drought that was expected that year. Subsequently, the central government issued the Royal Decree 3/2008, which established exceptional measures to guarantee the supply of water to towns affected by drought in the province of Barcelona.

The last of the said decrees was passed amid a climate of social opposition. Work groups all over Catalonia were against the possibility of reviving traditional Spanish water policies, consisting of building infrastructures for controlling the distribution and transportation of water as a solution to drought. On 18th May 2008, the Platform in Defence of the Ebro River (PDE in Spanish)¹ staged a mass demonstration in Amposta. In view of the lack of agreement on the number of people who attended the event (versions differed between 6,000 and 35,000 participants), the demonstration organisers published what they called ‘the other figures of the protest, of mobilisation on the Internet’:² the weblog of the Platform received an average of 633 visits daily in the week before the protest and reached 15,623 visits on 20th May. On the same date, it had 87 friends on Facebook, 51 readers following its news on Twitter, 177 subscribers to the blog’s bulletin sent via FeedBlitz and 222 subscribers to its mailing list.

The figures show the type of work the PDE and other organisations undertake on the Internet to make Spain’s water management problems visible. With this in mind,

¹ The PDE is a social platform created in Tortosa (Spain) in 2000. Its main activity focuses on promoting a perspective on water management that is contrary to transfer policies planned by the Spanish government. The group is especially known for its resistance to the so-called Ebro Transfer outlined in Law 10/2001.

² See, <http://ebre.net/bloc/?p=163>.

other cases from the same period of drought can also be mentioned. For example, the New Water Culture Foundation (FNCA in Spanish)³ headed its first page with news and articles, which proposed an alternative to the governmental solutions. In April 2008, the Ecology and Development Foundation (ECODES in Spanish)⁴ dedicated its monthly theme to drought. Environmentalist organisations such as Ecologists in Action⁵ or Greenpeace Spain published press releases and sent them out to their mailing lists.

Despite the great interest displayed by non-governmental organisations (NGOs), drought in Catalonia soon ceased to be a leading topic for the media. Rainfall increased the reservoir levels, rendering any water supply restrictions in Barcelona unlikely, as well as making the water works stated in the Royal Decree 3/2008 unnecessary. After the announcement of the abolition of this decree, in June 2008, water problems took a backseat position in the press, radio and television. However, the 'mobilisation on the Internet' did not come to such a standstill since it forms part of a sustained effort to create awareness about such issues in Spain. In this article, we would like to investigate the way in which this type of 'mobilisation' brings visibility to water affairs. We will focus particularly on how different organisations use the World Wide Web (WWW) to draw up their own definitions of the topics concerned.

In the last few decades, the Internet and the Web have developed as a venue for political communication. Though the use of the Net for political purposes is minor compared with other purposes (Dahlgren 2005), it offers citizens the opportunity to engage in public discussions (Byrne 2007), to persuade others how to vote, to coordinate or organise collective actions, and to learn about candidates or issues (Bimber 1999). Nowadays, the growing popularity of the Net makes more and more people turn to online media for political campaigns (Howard 2006), news and information (Al-Saggaf 2006). The latter is especially notable in times

of emergency and conflicts (Choi et al. 2006), as well as when certain issues arise and important environmental or economic repercussions occur (Jankowski et al. 2005). Thus, it is quite common for different organisations and individuals to make use of the Internet to address a potentially very wide audience (Marres and Rogers 2008).

Certainly, the Internet has an important role in mainstream and institutional politics, but also in extra-institutional, non-governmental groups, organisations and social movement activities (Kavada 2005). Therefore, a significant variety of players are using the Internet and other communication technologies for civic purposes (e.g. Rodríguez et al. 2001; Everett 2002; Shumate and Pike 2006). Authors interested in this phenomenon have highlighted Internet emergence in the public arena (Dahlberg 2007, Friedland et al. 2006) and have described the presence on the Net of discursive networks and communities (Mitra 1999) focused on the construction of public interest issues (Rogers and Marres 2000; Rogers 2002). The existence of these expansive communication spaces facilitates the fragmentation of the public sphere, but also pluralizes it (Dahlgren 2005). The increased diversity of political information online is one of the main reasons for using the Internet to get news and for a highly issue-involved audience to consider it a credible source of information (Choi et al. 2006). Moreover, it has been found that it could help reinvigorate civic life (Boulianne 2009). This explains why the Internet's capacity to offer a heterogeneous vision of public affairs has become a topic of interest in social science.

Being situated within this field, Internet studies offer us different methodological options. Among them, the most applied are virtual ethnography, discourse analysis and structural analysis. The first includes a wide variety of sociocultural methods that are useful for describing how people and groups create culture (Hine 2000) and shared symbols on the Internet (Howard 2002). This concern for the symbolic aspects of Internet usage is also present in discourse analysis on the Web, which works with website texts and images (Schneider and Foot 2005). Thus, the content of the Web becomes its main object of study. Structural analysis has another interest; nourished by the development of social network analysis, structural analysts focus on the study of hyperlink networks that make up individual websites or groups of websites (Park and Thelwall 2005).

This study follows the structural analysis approach. Specifically, it has retrieved conceptual and methodological tools from the work of Rogers and Marres. These authors understand the Web as a forum for relevant organisational interaction and for issue publicization (Marres and Rogers 2008; Marres and Rogers 2008). The analysis of such types of participation involves identifying

³ The FNCA is a non-profit organisation founded in Zaragoza (Spain) in 1998. Of a markedly scientific-academic profile, this organisation periodically organises the Iberian Congress on Water Management and Planning.

⁴ ECODES is a non-governmental organisation founded in 1992 with headquarters in Zaragoza. It is composed of a group of professionals who work towards sustainable development in Spain and Latin America by creating programmes and projects in different fields, including water management.

⁵ Ecologists in Action (Ecologistas en Acción in Spanish) is a confederation of environmentalist groups from all over Spain. It was founded in 1998 and forms part of the so-called social environmentalism, working towards transforming the prevailing development model. In its endeavour to do so, it carries out awareness campaigns as well as public reports against behaviour that damages the environment in general and water resources in particular.

the sites of the organizations that make up an 'issue network' as well as examining the 'heat' of the affair that they have in common, its life expectancy and fate (Marres and Rogers 2008). In this article, we will take a similar approach. More specifically, we will review the hyperlink network of organisations circulating information related to the 'New Water Culture' (NWC), an approach to water management and policy that has been widely distributed in Spain in recent years. In the first part of the article, we will explain what this focus entails. We will then examine its presence on the Web and draw up an 'issue network', which will represent the main organisations responsible for making the NWC visible on the Web. Lastly, we will draw conclusions from the results obtained.

A New Water Culture Network

Since the mid-twentieth century, water problems have become an important and increasingly relevant subject for a wide range of players. Originally, it had low salience and was predominantly technical; however, in recent years, it has created a multi-actor policy environment (Bressers et al. 1994). Thus, for example, it can be estimated that there are between two and three hundred players involved in European Union Water Policy; we must add to this an even larger number of stakeholders at the level of the member states (Richardson 1994). As far as Spain is concerned, there are no statistics that illustrate this fact; however, authors such as Pérez-Díaz et al. (1996) state that for several reasons, the national hydraulic policy community—strongly united from the very beginning—has become an extended, plural network, for whom the contemporary water policy is a matter of concern.

Spanish water policy has traditionally been considered a purely public initiative implemented by means of hydraulic intervention plans. This model, known as 'offer management', aimed to supply sufficient water at a low cost to all social agents prepared to use water in a productive manner (for a general view on the 'hydraulic paradigm' in Spain, and its recent transformation, see Tàbara and Ilhan 2008). The relation established between water works and economic development meant that this way of dealing with the country's water problems received wide acceptance. However, the eighties saw the beginnings of a crisis in water policy in Spain. A growing concern trickled down through local groups, scientists, NGOs and regional authorities (Tàbara and Ilhan 2008) who started to discuss the economic, environmental, political, territorial and international cost of water management (Pérez-Díaz et al. 1996). Over the following decades, the presentation of the draft of the 1993 National Hydrological Plan (NHP) and

the passing of the 2001 NHP became key moments for critics to confront those in favour of the traditional water policy. Through these debates, new issue definitions and discourses emerged. A study of Tàbara et al. (2004) found different 'cultural frames', which highlighted national, environmental, economic, high-risk, territorial and legal aspects of the NHP. Among these, the 'sustainability frame' stood out due to its innovative character and growing importance.

Stemming from a multidisciplinary approach, the sustainability frame has become the legitimate trustee of the culture of sustainable development (Tàbara et al. 2004). The name most often used to refer to the sustainability frame in water controversies is 'New Water Culture'. This term was coined by the hydro-geologist Javier Martínez Gil (1997) and came as a result of the theoretical work carried out by the Coalition of People Affected by Dams and Transfers (COAGRET in Spanish). The goals of this organisation have been to change the orientation of Spanish water policy and establish the 'new water culture that the country needs in order to face the challenges (...) presented by good usage and conservation of the resource' (Martínez Gil 1997:15, our translation).

In line with that expressed by Martínez Gil (1997), Spain needed to abandon the prevailing development model and replace it with a new deontological code based on the principles of solidarity, efficiency, subsidiarity and participation. The establishment of this NWC continues Martínez Gil (1997), requires an institutional transformation, a review of water policy and of water demand management, and modernisation of the irrigation system, as well as the forthright rejection of the use of transfers. Such claims are coherent with those expressed by different sectors of Spanish society, particularly by the critics of the 2001 NHP. Thus, the concept of the NWC and the new identities that emerged around it began to gain increasing attention (Jiménez Sánchez 2005; Tàbara and Ilhan 2008) and became a new paradigm, which articulates the significant part of players who are implicated in water issues in Spain (Aceros and Domènech, 2010). This study endeavours to approach this phenomenon. With this aim, the concept 'issue network' has been used.

Hugh Hecló (1978) proposed this concept to refer to the Webs of watchers who define public affairs by sharing information about them. Originally thought up as an anti-public entity, which undermines the representative system of government, today it is considered part of the processes of wording, elaboration and implementation of public entities (Bressers et al. 1994). For such authors as Marres and Rogers (2008), issue networks should not be considered in opposition to the public, but rather organised publics. These are one of the forms in which political outsiders address affairs that the traditional political

institutions cannot (Marres 2007), thus playing an important role in the formation of new public spheres'.⁶

According to Rogers and Marres, 'issue networks' are heterogeneous sets of entities (individuals, organisations, information formats, etc.) that exhibit mutual acknowledge (Rogers and Zelman 2002), deal with a specific affairs and configure a hyperlink structure around certain keywords such as 'climate change', 'hydroelectric dam' or 'genetically modified foods' (Marres and Rogers 2008; Marres and Rogers 2008; Rogers and Marres 2002). Their study on the Web does not trace all the issue-networking practices that may be going on but it discloses a particular type of such practices, the configuration of publicising issue articulations: 'a network that is in the business of publicising the issue' (Marres and Rogers 2008: 925).

As we have already stated, in our study, we trace a concrete key expression ('New Water Culture') rather than a controversial subject. However, we consider that the hyperlink structure we have constructed could also be considered an 'issue network' or, failing this, a sector of a wider network expressing water management in Spain (specifically, a public sphere dedicated to making the sustainability discourse visible). We took some strategies derived from Rogers and Marres's issue network analysis and applied it to offer an understanding about the Web configured around the NWC on the Internet.

To trace issue networks, Rogers and Marres use network location and visualisation software called 'Issue Crawler'. With this web-based tool, they follow hyperlinks from a set of web pages that present the subject, capture the outlinks from these starting points and keep their authority threshold (i.e. a significant number of outlinks the sites have in common). If the outcomes disclose further web pages that deal with the issue in question, and if these pages are sufficiently interlinked, the Issue Crawler is supposed to find an issue network (Marres and Rogers 2008). Issue Crawler significantly facilitates the sampling and offers powerful tools for graphic representation. However, we decided to avoid its use in order to have greater control over the data collection by taking into account the following criteria:

- *The existence of a common form of expression about the subject*: nodes included in the issue network

⁶ Issue network analysis must be differentiated from other research approaches to the Web. In particular, it should be distinguished from Web Sphere Analysis because both are interested in the hypertext areas configured around certain events, concepts, and issues. What Schneider and Foot (2005) call 'Web Sphere Analysis' is a multimethod approach that requires important work for data storing and the outcome triangulation. On the other hand, Issue Network Analysis is a 'landscaping technique' (Rogers and Marres 2000) where structural and discursive research strategies prevail, and where the emphasis is on the hyperlink and meaning network visualization.

explicitly mention the 'New Water Culture' in its contents.

- *Authority threshold, or indegree, equal to or higher than 2*: in the structure, every website has at least two inlinks, meaning it is selected by a minimum of two issue network nodes.
- *Geographic delimitation*: only the websites of players based in Spain have been considered.
- *Persistence and/or recurrence of the nodes*: the websites included in the issue network appear in most, or all, of a group of samples taken during the research.

These criteria have been applied throughout five waves of samples, which took place in August, September and October 2007, and in January and May 2008. All of the samples were carried out manually by means of link-following. The procedure starts with the identification of a reduced number of starting points⁷ and continues by following-up their outgoing links, creating an initial list of candidates, assessing the authority threshold of each of these and following-up the hyperlinks found on websites with an indegree equal to or higher than two. A final list of candidates is then drawn up, the authority threshold is assessed again, and the definitive sample is created. Once all the samples have been completed, these are used to prepare the issue network. With this aim in view, the persistent or recurrent nodes are identified and assessed to ensure they meet the previously described criteria.

The treatment and display of the data obtained were carried out with the help of UCINET (Borgatti et al. 2002) and NetDraw (Borgatti 2002). These tools offer the possibility of complex calculations by applying social network analysis algorithms. In our research, we employed only two basic measures, which allowed us to identify relevant players on the hyperlink structure according to the following indexes:

- *The presence of a high authority threshold (centrality index)*: the nodes with the greatest indegree have been considered the most relevant.
- *The relation between the indegree and the outdegree (popularity index)*: the number of outlinks per node (the outdegree) was obtained. This value allows us to differentiate enthusiastic linkers (their outdegree is bigger than the indegree) from 'popular' websites (their indegree is bigger than the outdegree).

⁷ Three search engines were used: Google, Yahoo! and Altavista. Each of these was queried for 'New Water Culture', limiting the search to websites in Spain. From the returns of each search engine, the first ten that corresponded to concrete collectives were selected. Once the first lists were drawn up, the websites were compared. Those that appeared in all the search engines were chosen as starting points for the analysis. Other techniques for defining starting points can be found in Rogers and Zelman (2002).

Along with identifying the relevant players, the analysis we carried out endeavours to be sensitive to the linking habits of the traced players. Roger and Marres's work (2000) was used as a guide. In this study, the authors discovered distinctive hyperlinking styles for .org,.com and .gov. The .org sites displayed what they called 'cross-linking', meaning the establishment of links with other .org nodes as well as with .com and .gov websites. This 'new media .org style' was less apparent in .gov sites, which are more inclined to form 'closed communities' through internal links with other .gov websites. Nor was it dominant in .com sites which, in general, were more inclined to have low internal and moderate external linking. This 'old media style' comprised the integral transfer of the network services portfolio, without establishing links with other corporations.

In the pages that follow the sampling results, the issue network and the analysis of the nodes' relevance and hyperlinking styles are presented. Thus, a picture of the NWC on the Web is offered. It is also considered that this picture may permit us to find out the actual state of the issue network as well as its trends. The hyperlink structure suggests a change in the publicising sustainability frame articulations and the existence of a certain tension, which this paper tries to show.

New Water Culture on the Web

By following the trace left by the NWC on the Web, the samplings have facilitated the gathering of relational information from more than one thousand websites. From this large number of nodes, 23 met all the criteria mentioned in the previous section (see Table 1). The visual representation of the issue network of the NWC was created with these websites (see Fig. 1). In this hyperlink structure, 48% of the nodes are governmental websites (central government, autonomous governments⁸ and hydrographic confederation⁹ sites). The remaining nodes were created by foundations, associations, networks or grassroots platforms and individual citizens. These 'non-governmental websites' represent 52% of the hyperlink structure.

⁸ The autonomous community is the first-level division in Spain. These territorial organisations have existed since 1978 and enjoy legislative autonomy and executive powers, as well as the authority to self-manage through their own representatives.

⁹ Hydrographic confederations are basin organisations created in 1926. They are currently responsible for preparing, following-up and reviewing hydrological plans for the basin, planning, building and exploiting hydraulic works in the jurisdiction, as well as administering and controlling resources.

A wide acceptance of the NWC can be appreciated in the issue network. Upon examining the content of the 23 websites, it is remarkable to note that the majority of them publish content openly in their favour. Only one website displays a critical view (the Murcian government website, *carm.es*). However, this does not mean that all the players make up one group in defence of the 'New Water Culture'. A detailed study of the inlinks and outlinks reveals that the governmental and non-governmental nodes are more inclined to link and be linked within their own sector (see Table 2). Figure 2 shows the two sectors separately. From the governmental group of websites, the position of the Ministry of the Environment¹⁰ (*mma.es*) stands out due to its authority threshold. With an indegree of 12 in the issue network and of 5 in its own group, we have found it to be the node with the most centrality. With an indegree of 4, another website shows a similar recognition level: the Web of the Government of Aragon (*portal.aragon.es*). Following this, there are four nodes with an indegree of 3: the Governments of the Balearic Islands (*caib.es*), Galicia (*medioambiente.xunta.es*), Murcia (*carm.es*) and Madrid (*madrid.org*). The Ministry of the Environment and these websites share the main positions in a sector of the issue network characterised by a certain level of political centralisation, played down by the presence of the autonomous governments.

The non-governmental sector is less centralised. Four websites clearly stand out here: Ecologists in Action (*ecologistasenaccion.org*), the Spanish section of Greenpeace (*greenpeace.es*), FNCA (*unizar.es/fnca*) and ECODES (*ecodes.org*). They all have an indegree of 6 and, after the Ministry of Environment, are the most central websites in the issue network. These websites, together with the others that make up the non-governmental sector, are players of varying importance. We find websites for big organisations (i.e. *greenpeace.es* and *ecologistasenaccion.org*), local organisations (such as the Aragon River Association, *yesano.com*) and entities that, having their administrative headquarters in a specific city, carry out activities in different places (i.e. *ecodes.org* and *unizar.es/fnca*). There are also nodes that can be called 'aterritorial' (Howard 2002) (e.g. the informative web pages *infoecologia.com* and *rebellion.org*).

If we return to Table 1 to find relevant nodes, we discover that four governmental nodes (*chebro.es*, *madrid.org*, *mma.es* and *portal.aragon.es*) and five non-governmental nodes (*ecodes.org*, *ecologistasenaccion.org*, *greenpeace.es*, *unizar.es/fnca* and *wwf.es*) have the highest authority

¹⁰ Created in 1996, the Ministry of the Environment is responsible for the environmental policy of the Spanish Government. At the time the samples were taken, it was responsible for national hydrological planning, controlling the carrying out of projects on a national level and supervising hydrographic confederations.

Table 1 List of nodes that make up the ‘New Water Culture’ issue network

Node	Name	Outdegree	Indegree
1	bakeaz.org	3	3
2	caib.es	0	5
3	carm.es	0	5
4	chebro.es	1	6
5	coagret.com	8	4
6	ecodes.org	0	9
7	ecologistasenaccion.org	16	8
8	Greenpeace.es	0	9
9	Infoecologia.com	7	5
10	Ingurumena.ejgv.euskadi.net	2	4
11	juntadeandalucia.es	14	3
12	la-moncloa.es	0	2
13	madrid.org	0	6
14	mediambient.gencat.net	9	5
15	medioambiente.xunta.es	7	5
16	mma.es	11	12
17	portal.aragon.es	0	8
18	rebellion.org	2	2
19	redtierra.org	5	2
20	riosconvida.es	2	3
21	unizar.es/fnca	13	7
22	wwf.es	13	6
23	yesano.com	9	3

The URL, the name, the outdegree and the indegree of each one is listed

Fig. 1 Graphic representation of the ‘New Water Culture’ issue network. The shading indicates those websites that are governmental. The size indicates each node’s indegree

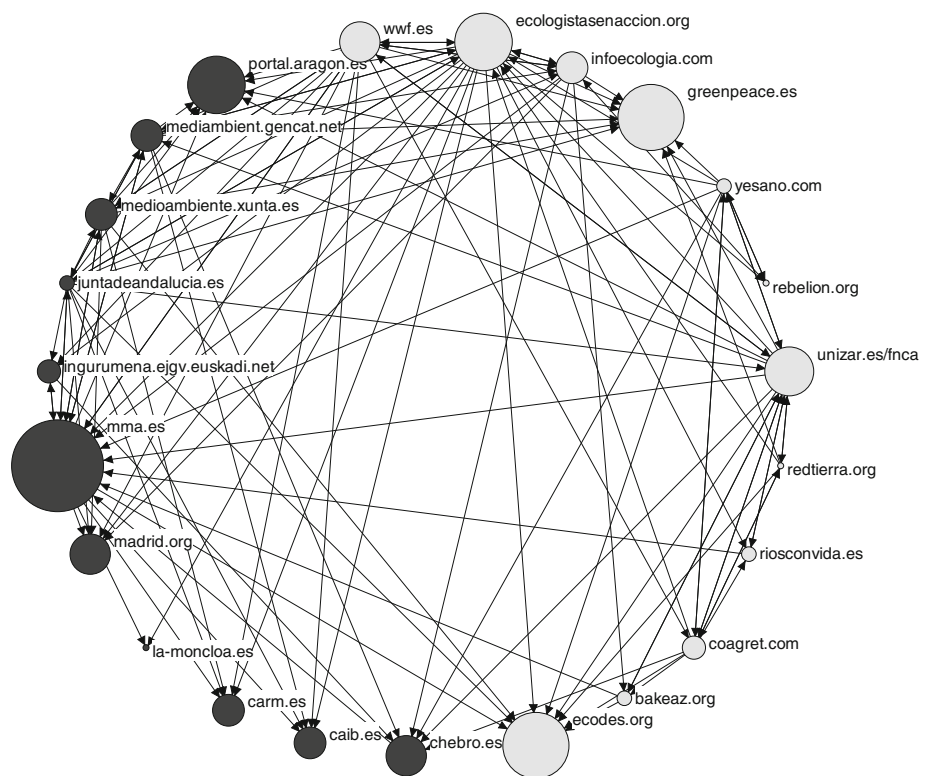


Table 2 Links exchanged between GO and NGO nodes

	Outlinks (%)		Inlinks (%)	
	GOs	NGOs	GOs	NGOs
Governmental organisation	30.68	14.32	30.49	31.51
Non-governmental organisation	31.40	47.60	14.23	47.77

threshold. This equality practice in terms of centrality contrasts with the marked difference in the popularity index. In this case, only three non-governmental nodes (ecodes.org, greenpeace.es and riosconvida.es) are shown to be popular, in contrast to the governmental nodes where eight are popular (caib.es, carm.es, chebro.es, ingurumena.ejgv.euskadi.net, la-moncloa.es, madrid.org, mma.es and portal.aragon.es).

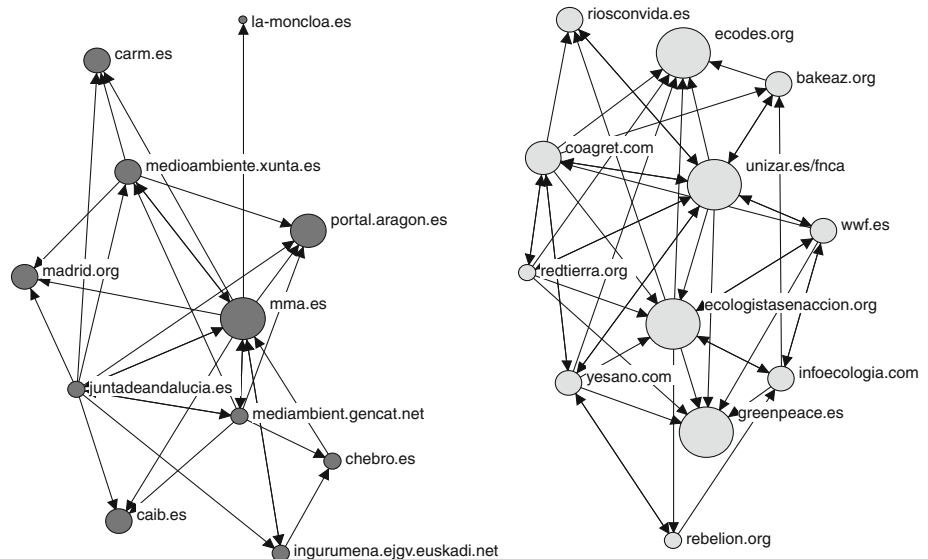
The difference between the centrality and popularity of the nodes hints at the existence of an asymmetry between the two issue network sectors. In fact, governmental websites display more of a tendency towards high internal and low external linking. Table 2 shows that of the total number of outgoing links governmental nodes use in the hyperlink structure, 68% are directed towards websites from the same sector. In contrast, they provide few outlinks to NGO websites (only fourteen, some 32% of the total). The non-governmental nodes also interlink among themselves. However, in these, we find more likeness to the 'org style' mode of communication. Of the outgoing NGO's links that are used in the issue network, 40% are external links. This percentage makes up half of the inlinks received by governmental websites. In short, analysis of the linking habits indicates that NGO websites are more apt to acknowledge GO websites than vice versa.

The issue network described before is not only a picture of the actual NWC on the Web, but a moment in the process of making water management problems visible in Spanish society. After analysis, its trends can only be glimpsed at. The NWC carriers at the end of 2007 and beginning of 2008 differ greatly to the carriers in the first few years of the twenty-first century. At that time, according to Tàbara et al. (2004:176), those who defended it tended to find themselves "on the periphery of power, public communication and the market". In our opinion, the situation has changed. The issue network informs us that the NWC has gone from being used only for political outsiders, to also forming part of conventional governmental discourse.

The key players in our hyperlink structure make up communities of governmental and non-governmental nodes. The governmental participation in the issue network can be interpreted as a success of those who in the last decades demanded water policy transformations. The NWC network shows us that governments have appropriated the sustainability frame. It can be interpreted as an impact of the communication between the latter and the NWC movement (Tàbara and Ilhan 2008). However, this fact opens no period of universal agreement about the meaning and application of the 'New Water Culture'. Both the closed character of the two sectors and the existence of asymmetric relations between them indicate the existence of no common bloc dedicated to the articulation of the NWC in Spain. It allows us to suppose that the hyperlink structure suffers a gap between the two different uses of the key expression.

Although the issue network indicates a publicising tendency on the Web (Marres and Rogers 2008), it is also possible to find 'de-publicising articulation of issues'

Fig. 2 Representation of the GO and NGO sectors of the issue network. The size indicates each node's indegree



(Marres 2007), which means practices that disable the opening up of the issue to outside scrutiny. To illustrate this statement, we can refer to Bruno Latour's work (2007) 'Turning Around Politics: A Note on Gerard de Vries' Paper', where he proposes different meanings of the word 'political' that can also be considered different issue articulations: (1) 'political-1': the transformation of our world by means of establishing new links between humans and non-humans (e.g. when the capacity to retain and transport large amounts of water, derived from hydraulic engineering information and devices, transforms the socio-economic panorama of a country); (2) 'political-2': generating public interest and concern about a certain matter (such would be the case with social mobilisations against water works that affect local communities and eco-systems); (3) 'political-3': the unsuccessful attempt by the government to turn a problem of public interest into a question of common good (e.g. as when the Royal Decree mentioned at the beginning of this article was unable to bring the controversy on drought in Catalonia to a close); (4) 'political-4': public participation in an endeavour to solve problems raised by science and technology (in which case 'deliberative democracy' and its various 'democratisation of science' procedures are spoken of); and (5) 'political-5': when a topic becomes part of the daily routine of governments (as has happened with urban sewage systems).

Rogers and Marres's works, as Latour (2007) points out, are especially concerned with political actions of the second type. Networks that are usually established in such cases tend to be publicising issue articulations. The issue network that we have presented here has partially the same character. The presence of an important NGO sector that uses the key expression to define water problems that are considered relevant (inefficient irrigations, obsolete distribution networks, unsustainable uses of territory, etc.) proves this fact. The NGOs associated with the NWC movement try to indicate that the government's attempts to articulate sustainable water management to water policy have been deficient, inadequate and fruitless. They are much closer to the 'political-3' stage than to the 'political-2' stage. Political outsiders have passed from opening water issues to public scrutiny to criticizing the form in which the authorities understand and use the key expression. A simple revision of the NGO's web contents allows us to maintain this affirmation. Therefore, we quote two fragments that may serve as examples. The first one published by FNCA in May 2007 refers to the civic opposition to the enlargement of Yesa's dam, in Navarra (Northern Spain):

Since this movement started, there have been three governmental relays (...) The difference in regard to

those occasions is that lots of people previously affected (...) now feel like orphans of the heat and the force that we once gave in abundance. For them, what has really changed is just the manner of the official hydrological policy. The discourse has changed ... and nothing else! (Our translation).

In this fragment, the recurrent criticism, which the NGOs direct against the authorities, is noticeable. The governments have adopted the sustainability frame as a discourse only and have never put them into practice. The following fragment, extracted from a report published in April 2008 by the Ecologists in Action and Greenpeace, conveys the same idea:

[These organisations] strongly object to the current proposal to supply water to Catalan internal basins through the lengthening of the minitransfer (...) the option of bringing water from the Ebro river to the Catalan internal basins definitely buries New Water Culture. Both organizations complain that their claims about saving measures and of more efficient water management were not listened to. This fact, in their opinion, has led to the point where desperate solutions must be proposed, (...) which bring no sustainability to the Catalan territory (Our translation).

This fragment, reporting the governmental measures against the 2008 drought, explicitly shows that the NGOs are convinced that their suggestions are not being taken into account. The apparent agreement on the NWC, they say, has not been taken to its effective application but rather to its possible abolition. On the other hand, the governmental sector uses the sustainability frame in another way. In the reference to the 'lessons learned' during the drought in Catalonia, the Electronic Bulletin of Environment and Housing of the Catalan Government No 246, 1st July 2008, states:

The government and the citizens have learned that water is not in unlimited supply and therefore should be used sensibly. For this reason many decisions and proposals have been made and many measures undertaken against the water shortage problem. Despite last months' rainfalls, the main objective for everyone is to continue saving water and fighting for a new water culture. Furthermore, we must continue building a more sustainable country that is committed to knowledge and technical innovation and which reaches a new stage of wellbeing for its citizens (Our translation).

With these kinds of declarations, the authorities are likely to promote efficient water management and the use of water saving technologies that they consider necessary

for a sustainable approach to the water problems. However, they fail to mention certain controversial strategies such as river transfers and portray themselves as NWC defenders. In consequence, they frequently announce events where this is discussed and its implementation is promoted. The way they do this leaves the impression that the environmental sustainability policies and programmes form part of their daily routine, now and in the future. Thus, we understand that their use of the NWC expression is 'political-5'. Their message, hence, is something like: 'there's nothing to be worried about, we've got things under control'. In this sector of the issue network, then, active use of the key term serves as closure to the controversies about sustainable water management. In a way, it endeavours to bring the debate on sustainability to a close and erase it from the public sphere.

Therefore, the issue network reports on a gap that currently affects the development of water matters through the sustainability frame in Spain. This gap presents itself, firstly, in the linking habits that make up the issue network. These reveal two closed sectors that establish an asymmetrical relationship. Secondly, it appears in the form of two different (political) issue articulations. On the one hand, we have the attempts to introduce the NWC into the everyday functioning of the government machine that, although the traced query term is visible, contributes to its disappearing from the sphere of public concern. On the other hand, there are the constant attempts to show that what the authorities understand by the NWC is a problem in itself. In this latter case, the key term continues to be used with the aim of introducing it into open debates.

Conclusion

This web study traces the issue network of the 'New Water Culture' on the WWW in the hope of understanding how sustainable water management is made visible on the Internet. Our analysis suggests that, after the opposition to the Ebro Transfer, a new scene opened up for the sustainability frame. Nowadays, sustainability discourses are no longer an emerging proposal but rather a main frame within Spanish water debates. However, the apparent success of the NWC demands a more detailed study. As shown in our hyperlink structure, it seems evident that the 'erratic destiny of issues' (Latour 2007) is far from being a uniform practice of publicisation.

In our study, the NWC appears as an expression linked to the justification of the most current water policies. The key expression abounds in the websites of the central and autonomous governments as a response to the wide social mobilisation that took place at the beginning of the twenty-first century. This phenomenon seems to be an attempt to

prove that the state has adopted the problem definitions of the NWC movement and transformed them into a political topic in the fifth sense proposed by Latour (2007). In this regard, discussions about old and new water policy appear to be resolved. Nevertheless, the presence of a strong non-governmental sector that continues to make public its use of the NWC indicates that the situation is far from being so straightforward. Its texts suggest that, in an issue network, the use of the same terms to refer to the same topic is not a guarantee of agreement or of mutual understanding.

The network that we have traced suggests that movement in the direction of normalising the practice of new water policies in Spain has lost something along the way. Due to this, the NWC movement remains, asking political players to retrace their steps and examine what is understood by the expression 'NWC'. In their opinion, a lot about sustainability still remains to be discussed. A lot also remains to be done. For example, the connection between discourse innovation and other political practices is still claimed frequently. Filling the gap between authorities and the NWC movement is certainly another pending task. In this sense, as Tàbara and Ilhan (2008) state, important institutional developments and improvements are needed to make effective the cultural transitions proposed for the NWC movement: 'advances in the direction of sustainability entail the articulation of processes that can yield opportunities and resources for empowerment and coordination between different concerned agents working on different scales and domains' (p. 68).

Whether advances can be made in generating policies that are coherent with the NWC is something that future studies will reveal. For these, issue network tracing may serve as a first-rate conceptual and methodological tool which, in turn, proposes a framework for understanding contemporary water policy and sustainable environmental management. In such a political arena, the making of rational and cost-effective decisions requires consistent and relevant information on the status of water systems (Seager 2001; Timmerman and Langaas 2005). However, if governmental institutions want to make such decisions based on public participation, they need something more than just environmental information:

"Adequate IC [information and communication] procedures ought not to show 'scientific facts' but also the motives, values, strategies, organisations, technical developments and related options which diverse cultural contexts provide to deal with and to reduce socio-economic pressures on the ecological systems. That would mean not only to depict an accurate and detailed picture of maps and figures on impacts, costs and benefits of possible environmental, economic or social changes, but above all, to make

sure that the publics are able to understand the assumptions, theories, political interests, and functions which determine the content and origin of such information” (Tàbara 2005: 46).

In line with this, Ledoux et al. (2005) highlight the necessity to consider a wide range of evaluation methods and techniques that allow a sustainable approach to water management. Inside the toolbox, the authors include what they call ‘stakeholder mapping’ that permits the identification of ‘interest’ groups, stakeholder networks, institutional arrangements and ‘policy networks’ relevant to the policy issues of concern. The analysis presented in this paper can be considered an example of this kind of mapping: it offers a panoramic view of the plurality of voices that give sense to environmental information. In this way, it can be applied as a tool for the public comprehension of issues at stake and as a strategy to generate useful knowledge in processes of citizen participation.

It is worth mentioning that there are a number of important human communication channels in cyberspace (Choi and Danowski 2002) offering the possibility to establish many different varieties of communication (Burnett and Marshall 2003). Therefore, alternative procedures to map the relationships among players are possible. In this sense, the advances introduced on newsgroups (Choi and Danowski 2002), web (Rogers 2010), semantic (Leydesdorff and Welbers, in press), mobile interfaces (Cao et al. 2007), or twitter activity (Boguta 2009)¹¹ and socio-political networks analysis and visualisation should be mentioned. Therefore, we expect that the outcomes presented here and the advances on IC technologies studies will be relevant both to social analysts and all the players interested in discourse on and the practice of sustainability in Spain and in other contexts.

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¹¹ See also, <http://www.kovasboguta.com/>.

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Chapter 4

General Discussion and Concluding Remarks

Who can talk of what, be the spokesperson, represent what?

*Isabelle Stengers (2005)
The Cosmopolitical Proposal*

Which communities and reference groups are included in decision-making structures, **who** decides on inclusion and according to **which criteria** (for instance, territorial or functional definitions of communities and reference groups), and to what extent are decisional structures open for including additional participants?

*Arthur Benz and Yannis Papadopoulos (2006)
Governance and Democracy*

4.1. Introduction

The papers presented in the previous chapters were developed in connection with the R+D+i Project 'Science, Technology and Citizenship in Knowledge Societies'. This project aimed to explore the public understanding of the mutual transformation occurring between techno-scientific and public controversies. Water debates in Spain, particularly those related to the 2000 NHP and the Ebro Transfer, were the case of study. In the context of the above mentioned project, this PhD dissertation is primarily interested in the way public participation in disputes about complex issues is described and valued by ordinary people as well as by social analysts. Therefore, the following question about those players that are called upon to become involved in debates and decision-making has been posed: **How do people identify and accept players with the right to take the part of the 'public' in public participation?**

As I have already mentioned in Chapter 1, the papers which constitute Chapters 2 and 3 do not directly answer this question. However, some clues pointing to a tentative answer are noticeable in all of them, and the reader needs a key in order to make them explicit. The notion of Regimes of Legitimate Participation (RLP) is the reading key I propose to use in this PhD dissertation. **I define the RLP as a set of principles that govern the election of people or groups as worthy members of the public in situations in which science, technology and society controversially intersect.** Taking into consideration the outcomes of Chapters 2 and 3, in this Chapter I aim to discuss some elements related to this idea of RLP, enriching it and examining its

practical meaning. In order to do so, the following pages are organised around the following ideas:

- People identify and accept players as legitimate members of a 'public' mobilising categories and prioritising them thanks to dichotomous axes of value;
- The practical mobilization of such discursive tools occurs in communicative situations, such as focus groups, in conjunction with well-known forms of talk, e.g. narratives in which 'good' and 'bad' parties are clearly recognizable;
- The practical mobilization of the RLP also occurs in research methods, such as Issue Network Analysis (INA), through which social scientists actively participate in the constitution of the publics they examine.
- The mobilisation of the RLP in ordinary talk and social research produce striking social consequences, such as exclusion and elite-formation, posing questions about the 'democratic' character of public participation.

In the following pages I develop these ideas drawing on Chapters 2 and 3. The first idea is mainly supported by the inventory of players presented in Section 2.1., although it is re-visited using the Stenger's (2005) metaphor of the 'art of staging'. The second idea finds support in the Membership Categorisation Analysis carried out in Section 2.2. and, particularly, in the way the speakers employ a Political Geography of Common Sense in order to frame water controversies as scenarios of contention. The hyperlink analysis deployed in Section 3.1. provides support for the third idea. Specifically, the criteria used by the author of the paper are examined, and their relation with what Rogers (2002) calls 'link economy' is considered. The last idea is

presented in the final part of this Chapter as the main conclusion with which I want to close this PhD dissertation. Further ways of research are also suggested.

4.2. The RLP and the 'art of staging'

When Isabelle Stengers (2005) describes her 'Cosmopolitical Proposal' – a form of impure and slowed down issue politics –, a concern on the design of political scenarios emerges. Thereby, the author wonders, 'How to design a scene in a way that actively protects it from the fiction that 'humans of good will decide in the name of general interest?' (p. 1002). And the answer refers to an 'art of staging' allowing those engaged in multiple modes with the issue at stake to actively participate in a collective thinking process. Such an 'art of staging' calls for the constitution of a political stage in which debate occurs 'in the presence' of the 'victims' of decision-making. It also requires the distribution of roles between a number of characters: experts, diplomats and witnesses. According to Stengers (2005) the 'experts' are 'the ones whose practice is not threatened by the issue under discussion since what they know is accepted as relevant' (p. 1002). By contrast, 'diplomats are there to provide a voice for those whose practice, whose mode of existence and whose identity are threatened by a decision' (p. 1002). Finally, those 'victims' who avoid participating in the decision-making (even if it affects them directly) are represented by 'witnesses', whose role is 'conveying what it may feel like to be threatened by an issue that one has nothing to contribute to' (p. 1003).

I aim to draw on this idea of 'art of staging' in order to read public participation in a techno-scientific controversy as the skillful and creative production of a theatrical performance, and of its characters. Such a dramaturgical endeavor is deployed by

different actors, including those already involved in the controversy, but also other parties acting as observers and commentators. The former, lets call them the 'publics', are sustaining their performance, in real time, at the instances where debates occur and decisions are made. The latter, lets call them the 'audiences', re-produce the staging asynchronously, when everyday conversations and other actions turn to the publics' composition and their performances. Taking into consideration the data at my disposal, this dissertation is focused only on the audiences, and on how they do not simply *perceive* or *understand* the publics, but also contribute to their *constitution* through legitimation. In this respect, I owe much to the performative approach outlined by Strum and Latour (1987) and, more recently, by Latour (2005).

In order to clarify how ordinary people and social analysts (the audiences examined in this study) deploy their particular 'art of staging', a good point of departure is the practical knowledge they use to discursively produce publics for the purposes of public participation. I focus concretely on the inventories of players which people prepare and prioritise when facing debates and disputes on complex issues. The creation of such inventories is an activity frequently deployed during public-techno-scientific controversies (Callon, Lascoumes, & Barthe, 2009), and is what Stengers (2005) does when she attributes responsibilities among experts, diplomats and witnesses. To begin with the examination of this matter, a number of already developed inventories of participants can be mentioned. Boltanski and Thévenot (1999, 2006), whose work inspires the notion of RLP, argue that critical situations concretely involve *those parties in direct dispute*. In his revision of Sociology of Critical Capacity, Wagner (1999) classifies these parties into 'judges', 'observers' and 'others'.

By contrast, Dewey (2004) argues that any public is composed by all the actors who are aware of being affected by the *indirect* consequences of decision-making. Because these players are not immediately involved in the situation that can render threatening to them, they are finally represented by 'functionaries' who attend and protect their interests.

There are more lists of possible publics and its members at hand. Braun and Schultz (2010), for example, enumerate the 'general public', the 'pure public', the 'affected public' and the 'partisan public'. Collins and Evans (2002) speak about 'interactional experts' and 'contributory experts'. Callon (2008) identifies different forms of 'concerned groups' (e.g., 'orphaned groups' and 'hurt groups'), while Fuller (2003) introduces 'concerned participants', 'unselfish participants' and 'unselfish non-participants'. In this dissertation I present a tentative taxonomy in Section 2.1. Unlike the inventories offered by the above-quoted authors, it is a folk inventory of characters mobilised by the participants in a set of focus groups. That list is traced following an approach similar to that of Collins and Evans (2002), that is, looking for forms of expertise. In order to do so, utterances in which the speakers attribute knowledge to a number of players are identified.

The inventory of players produced by the participants of the focus groups includes 'experts', 'affected' people, 'beneficiaries', 'profit-seekers' and 'aware' parties. Some of the actors regarded as members of the public are well-known actors in the STS literature. On the one hand, scientists, engineers and other certificated specialists acting as 'experts' are key characters in the work of authors such as Collins and Evans (2002) or Turner (2003). On the other hand, 'affected' people can be seen as equivalent

to 'hurt groups' (Callon, 2008), 'lay experts' (Epstein, 1995; Kent, 2003; Kerr, Cunningham-Burley, & Amos, 1998; Prior, 2003) or 'experience-based experts' (Collins and Evans, 2002). As far as I know, the remaining labels do not attract the same attention in the literature on public participation¹. However, they are of prime importance in this PhD dissertation because they point to the existence of principles of worth not originally considered in Section 2.1.

The characters included in the folk inventory are not invoked in the same manner as the stage of the controversy. Some of them are worthy of the audience's confidence, while others are viewed with suspicion. For instance, the players who exhibit (certified or experience-based) knowledge are highly valued, and are considered legitimate participants. Meanwhile, those considered as without relevant or reliable knowledge are rejected as people with a clear right to be involved. In both cases, 'expertness' can be interpreted as the source of authority of 'experts', 'affected' people and, even, 'aware' parties². It is also the criterion used in order to construct 'beneficiaries' as illegitimate participants.

A first principle arises here: that distributing worth in the form of 'expertness'.

This principle resonates with the analyses on expertise in STS, and resembles the

1 In either case, what the speakers call 'profit-seekers' can be compared to the 'entrepreneurs' (Stengers, 2005) inhabiting the 'market world' (Boltanski & Thévenot, 1999, 2006). Moreover, the way 'aware' people behave matches ideals of what Boltansky and Thévenot call the 'civic world'. They are 'active citizens' (see, Neveu, 2011) acting as a reasonable members of society, engaged in public matters through a rational and well-founded individual opinion. Finally, speak about members of a public as 'beneficiaries' is framing them as 'consumers' (Wickson, Delgado, & Kjølberg, 2010) or 'users'. These latter categories enjoy a growing popularity in STS (see, Oudshoorn and Pinch, 2003).

2 These players can be considered as citizen experts because of their effort to formulate autonomous and reasonable arguments. 'Aware' people are not participating in the production of new knowledge using science, technology or experience, but doing epistemological patchwork: searching and linking diverse pieces of already existing data, from different sources. The resulting knowledge of this process is not viewed as 'objective' by the speakers, but as 'neutral' knowledge.

classical notion of 'expert power' in psychological perspectives on legitimacy (see, French and Raven, 1959). It is clearly visible in the folk inventory, but it is not the only principle that can be extracted from it. The categories such as 'aware' or 'profit-seekers', for example, point to criterion different from that of relevant, certified or experience-based knowledge. The 'aware' parties are epistemic players with an inner curiosity that pushes them to learn more about water issues. But they are not just people learning about the controversy. They are recognised as detached observers, who can recognise the problematic dimension of the situation. Their main virtue is consciousness. Because of this consciousness, they are regarded as players on the side of 'good' people: they are 'appropriate' participants. On the other hand, 'profit-seekers' are considered as players who use knowledge provided by 'experts' without yet being themselves epistemic actors. From the point of view of the speakers, what is important for politicians, political parties and companies is private or partisan profit and not knowledge. Because of that, they are positioned on the side of 'bad' players³.

The examples of 'aware' people and 'profit-seekers' reveal what I want to call the principles of 'awareness' and 'unselfishness' which emerge along with 'expertness' as principles for the evaluation of legitimate participants. The people and groups with 'rights' to participate in water controversies are those who possess some form of *expertise*, as well as those who are *aware* of the importance of the issues and have no *selfish interests*. A fourth principle can be extracted from the way speakers use that label of 'affected' people. In a similar way as the STS scholars do (see, for example,

3 This last outcome resonates with other studies about public engagement on environmental issues which indicates distrust in political authorities, industry and bussiness (see, Ricci, Bellaby, and Flynn, 2010).

(Brown & Mikkelsen, 1990; Brown, 1992; Epstein, 1995; Escoffier, 1999; Martin, 1991; Tesh, 2000; Wynne, 1989), the participants of the focus groups see the people living in the affected areas as holders of important and irreplaceable knowledge. However, the 'affected' people are considered legitimate participants not only because of such experience-based knowledge, but also because of a sense of justice which they represent. If the 'sufferers' (Barnes, 2002) are not included in decision-making, the process is not only seen as lacking information: it is regarded as highly unfair. Thus, harmful policies have debts to their 'victims', and their promoters have to call these players back, giving them the opportunity to speak (see, Webler, 1995). If this phenomenon is taken into consideration, 'affectedness' can be considered an additional source of worth in the 'art of staging'.

Thus, the folk inventory could be read through the lenses of the principles of worth. From it, four of such principles can be listed. 'Expertness' is one of them. 'Awareness', 'unselfishness' and 'affectedness' are additional principles. These principles do not exhaust the entire universe of possible criteria for an audience to rate the members of a public. They are based on the data at hand, which do not cover all possible forms of understanding and co-production of techno-scientific controversies, but they do offer valuable insights into the ways the 'art of staging' is ruled. The first one can be formulated as follows:

Each principle of worth can be used independently in order to distribute legitimate or illegitimate roles among the players included in the stage.

In this respect, I argue that the principles may be considered dichotomous structures or 'axes of value'. Let me take the 'affectedness' principle as an example. It

not only refers to the 'affected' people, but also to the 'beneficiaries'. In fact, the latter can be viewed as asymmetrically interconnected to the former since both the harmful consequences and benefits of decision-making are distributed between them. 'Beneficiaries' and 'affected' parties can be classified according to their position in a continuum in which the reception of positive consequences are placed at one end of the continuum and suffering negative consequences are situated at the other. The continuum is none other than the 'affectedness' principle in the dichotomous form of an axis of value.

Considering each principle of worth as an axis of value, the legitimation of certain groups appear as necessarily linked with the delegitimation of other groups (which appear as what Latour (2005) calls 'anti-groups'). This is the reason why 'experts' can be considered as authoritative participants, while 'laypersons' are usually rejected as relevant voices in techno-scientific controversies. In like manner, in speakers' discourse conscious people and altruistic or 'neutral' parties usually appear as preferable and worthy in comparison to 'unaware' players and 'profit-seekers'. The very core of the RLP emerges here. I suggest that it is composed of the different axes of value with which ordinary people identify and rate legitimate and illegitimate participants in public-techno-scientific controversies.

The structural properties of the RLP's core is configured around well-known dichotomies: expert/lay, affected/beneficiary, aware/unaware, profit-seeker/non-profit-seeker. One pole of each axis is highly valued, while the other pole attracts the opposite treatment from the speakers. Once this dichotomous structure of the RLP

core has been revealed, a second insight resulting from the present dissertation can be posed. It is about the basic operation of the RLP:

The dichotomous principles can be used independently in talk, but they can also be juxtaposed, placing a single player in more than one pole of worth.

In order to illustrate this idea, 'beneficiaries' can be invoked as an example. The reason is because people enjoying the positive consequences of decision-making can be placed in one of the poles of 'affectedness', but also in one of the poles of 'awareness' and 'expertness' axes. They are perceived as unaware and 'manipulated' people without a 'real' concern regarding water issues⁴. To that effect, they are the opposite of 'aware' people and their capacity of being conscious actors carrying out a constant effort of critical opinion-formation. On the other hand, if comparing 'beneficiaries' with scientists and engineers, they are not 'experts' at all. As a result, it can be said that they occupy three negative positions in three different axes of value: that of 'unaffected' people according to the 'affectedness' principle, that of 'unaware' people according to the 'awareness' principle and that of 'lay' people according to the 'expertness' principle. Hence, they appear as unattractive candidates for the speakers to be called to take part in a discussion on water issues.

The core of RLP and its basic operation of legitimacy distribution between players configure an abstract prototype of what is, in fact, a versatile toolkit people use in talk when they try to make a public-techno-scientific controversy observable,

4 It should be clarified that a sector of 'beneficiaries' is constructed in talk as politicised players who are in favour of the NHP. However, their protests and demonstrations are not viewed as the outcome of their autonomous choice, but rather resulting from a 'demagogic' political strategy. In that sense, they are not interested in water issues on their own. They are viewed as tools with which those who are really engaged in water controversies attempt to influence debates for their own benefit.

reportable and acceptable. In order to understand how this practical knowledge works, in the next pages I review Sections 2.2. and 3.1. In what follows, the conversational use of spatial categories included in the Political Geography of Common Sense, and the deployment of an Issue Network Analysis (INA), are viewed as concrete forms of the 'art of staging' in action.

4.3. The Political Geography of Common Sense and the RLP in action

The 'art of staging' is a practical endeavor. This is particularly clear when participatory mechanisms such as citizen panels, public hearings or consensus conferences are organised, and decisions about those who can be summoned are taken. The piece of work of Barnes, Newman, Knops, and Sullivan (2003) can be cited as an example. These authors have traced the methods used by UK local authorities, local health service agencies and non-governmental organisations to engage with the public in a set of 'deliberative forums'. According to the authors, although these forums were promoted as forms of 'community participation', in practice they were open not for whole communities, but to specific groups. The inclusion of such groups came about through explicit and implicit notions of representation and representativeness, but also through the very design of the mechanism (in terms of time, location and the nature of the dialogue), the use of categories of identification (such as 'minority ethnic group' or 'women'), and the attribution of skills and competences to those groups regarded as legitimate.

In this PhD dissertation, a particular method the audiences use in the constitution of a political stage around an issue is described. Concretely, I have outlined the use of a set of dichotomous principles in organising an inventory of players through

the distribution of worth between the members of a public. The mobilization of these principles is discursive in nature, but it is also a productive task with which a political collective is both rated *and* constituted. In this sense, I suggest that the speakers' 'art of staging' is as performative as that deployed by the organisers of 'deliberative forums' during their day-to-day work.

According to the performative view I subscribe here, societies and groups are produced through the many efforts to define them (Latour, 2005; Strum & Latour, 1987). The discursive definitions of a legitimate public for public participation, as they are achieved through the RLP, have such a performative character. However, the RLP are not the only tools apt for the descriptions of publics, so they are not usually mobilised alone in talk. Thereby, a third insight can be added to those stated in the Section 4.3. It is as follows:

The RLP does not necessary operates in isolation, but in conjunction to other symbolic resources which are socially available in a given communicative context.

It may be expected that, in order to constitute a legitimate group of participants, speakers mobilise the axes of value in connection with additional symbolic tools. Section 2.2. offers some examples in this respect. Concretely, the section calls attention to the importance of territorial identities in the case of water controversies in Spain. To do so, a discursive approach to the notion of spatial social identity was applied to the data coming from the focus groups. The analysis is focused on the usefulness of three toponyms ('Spain', 'Catalonia' and 'Valencia'). These toponyms are a small sample of a wide number of spatial categories included in the Political

Geography of Common Sense which is a profane way of ordering knowledge about a territory and its socio-political organisation.

The Political Geography of Common Sense is a source of key symbolic tools for the speakers; resources with which concrete discursive actions become possible. They include identity-work, but also framing and other practical activities such as the 'art of staging' itself. Consider, for example, the use of the toponym 'Spain' in the focus groups carried out in Catalonia. Utilizing it, speakers socially construct a scarcity frame within which the 'aridity' of the country becomes relevant, and internal imbalances which divide the territory in 'dry Spain' and 'wet Spain' are highlighted. The production of this context of scarcity and inequality is useful in the distribution of rights and obligations between players whose identity is delimited by their spatial membership. In addition, it contributes greatly to the RLP operation. In fact, the way speakers frame the situation, and the identities they socially construct, produce a scenario in which legitimate and illegitimate roles can be allocated between a set of groups and anti-groups.

The distribution of roles in the stage of scarcity and division does not occur in abstract. Rather, speakers assign roles by organising talk in concrete and recognisable ways. Such organisation can be achieved, for instance, through the deployment of usually linked pairs (Silverman, 1998) and through the use of the narratives and storytelling (Taylor & Littleton, 2006; Taylor, 2003). In this general discussion I only want to return to one example extracted from Section 2.2. in order to illustrate this. I refer to the discursive production of a clash between two well-defined territories: Catalonia and Valencia.

During the focus groups, the dispute between 'Catalonia' and 'Valencia' is depicted through the use of the already mentioned division between 'dry Spain' and 'wet Spain'. In that sense, 'Valencia' is clearly ascribed by the speakers to the first category and 'Catalonia' to the second one. The division of the map into dry and wet territories is one of the methods that people apply in order to identify confronted parties in water debates (Mairal, 1993). In the data at my disposal, the speakers moreover pepper it with the axis of 'affectedness'. As a result, polarised consequences and concerns are distributed between the people living in the delimited places: people from Valencia are interested in gaining a new source of water for their personal use, while people from Catalonia are worried about losing the hydrological resources sustaining traditional forms of life in the Ebro Delta.

This is not, of course, a precise picture of 'reality'. On the one hand, Catalonia is not part of 'wet Spain' which is a label usually employed in reference to territories located in the north of the country. On the other hand, not all of Catalonia was against the NHP. In fact, part of the Ebro's water was planned to be transferred to Barcelona, and the Catalanian Government was one of the supporters of the NHP. Nevertheless, what is important here is not the precision of speakers' accounts, but their practical effects. Thus, the descriptions produced by the speakers have to be understood as strategic symbolic movements with which people carry out concrete inter-actions. Employing the division between 'wet' and 'dry Spain', as well as 'Catalonia' and 'Valencia' as spatial categories for the identification of players, and the axis of 'affectedness' for their evaluation (and not other resources), the participants of the focus groups construct the controversy as a historical and epic conflict: it appears as

'struggles of interests' in which two old enemies are fighting in order to obtain or retain the scarce resources that each of them needs.

Thus, what the speakers do through the Political Geography of Common Sense and the RLP deployed together is the configuration of a geographic, moral and political stage in which water issues are performed as a story of contention. People achieve that by designing a scenario of scarcity, dividing groups spatially, and distributing roles between the already separated players. This is a recognisable organisation of talk, a narrative-like structure by which an easy comprehension of the critical situation is achieved. In such struggles 'good' and 'bad' parties – heroes and villains – are easily identified. Additionally, it allows speakers to position themselves in water controversies. In fact, as Section 2.2. suggests, the in-group is clearly favoured while the out-group is condemned: citizens of Catalonia are described as the 'victims' of water policy – that is occupying a positive pole in the RLP – and consumers from Valencia are portrayed as the 'beneficiaries' of decision-making.

The production of this narrative of contention illustrates how the RLP are deployed in talk together with other discursive resources. They also point to another key issue:

The mobilisation of the RLP in conjunction with other discursive resources may produce consequences in the interaction and eventually in the political arena.

Two consequences are particularly noticeable in the above-mentioned example. Firstly, the legitimisation of the in-group and its inclusion in the public as appropriate participants. Secondly, the exclusion of certain groups, particularly of outsiders. If the

public participation in techno-scientific controversies is considered as a strategy of scientific and technological governance (Irwin, 2008) or of a 'democratisation of democracy' (Graña, 2005), these latter consequences are particularly striking. As far as ordinary people understand 'participation' as being partial and conditional (that means, being open only to some), one can wonder to what extent it can actually be viewed as a form of 'democratisation' (as many scholars accept, and as some participants in the study claim) or not. In fact, even the effect of inclusion – possible through the RLP – can be viewed as remote from the ideal of the direct 'government of the people, by the people and for the people'.

Through the RLP in action people fragment the 'wider public' into pieces and distributes worth between them, legitimating only a small number of players which become the 'appropriate' spokespersons of the 'wider public'. The outcome of this logic of representativeness may be the constitution of moral and political elites. In this way, what are called 'deliberative forums' (Barnes et al., 2003) or 'hybrid forums' (Callon et al., 2009) can be interpreted as small group meetings in which an enriched and benevolent form of aristocracy leads a play of governance. In the following pages I revisit Section 3.1. in order to show how social analysts contribute to this elite-formation process through a sophisticated form of RLP: the Issue Network Analysis (INA).

4.4. The Issue Network Analysis and the RLP in action

INA is a structural approach to the Internet focused on the way different organisations exploit the Web in order to participate in techno-scientific controversies. It is a potentially useful tool in policy making and management since it supplies information

about the 'voices' participating in a debate. Nonetheless, it is not only a way of offering reliable information about the members of a public, but also a way of producing legitimising effects. In this regard, INA can be viewed as another expression of the 'art of staging': that performed by social analysts acting as observers and commentators of controversies. The study of the ways researchers also produce publics is of prime importance, since as Neveu (2011) states 'Institutions launching 'participatory procedures are indeed 'consuming' social sciences in large quantities, and social scientists are often called upon not only to evaluate but indeed to create procedures and publics' (p. 153). In the same sense, Delgado, Kjolberg, and Wickson (2010) argue 'STS scholars have increasingly begun to play an active and influential role in science policy, not only by producing (and contesting) meanings in theoretical debates, but also by acting as practitioners, organisers and evaluators of participation/engagement exercises' (p. 827).

In this sub-section I aim to discuss the rationale of the Issue Network Analysis. My point of departure is what can be called the 'democratic' character of the Internet. Advocates of this notion expect that Information and Communication Technologies (ICT) will produce instant democracy, well-informed and critical public deliberations, and effective communication with official representatives (see, Katz and Rice, 2002). In this respect, some authors consider that the Internet can foster political involvement (Kapoor, 1993) and that Internet activists are 'more democratic' than the public at large (Hill & Hughes, 1997:29). Other scholars suggest that the global network is intrinsically democratic, because of its horizontal and distributed design, as well as because it

opens ways for a free flow of information and the formation of rational opinions (Kahn & Kellner, 2005; Rheingold, 1993).

Because on the Internet 'everyone' can make their ideas public, it is assumed that a *fragmented but plural* 'public sphere' can be constituted online (Dahlberg, 2007). Drawing on such an approach to the Internet, in Section 3.1. the focus is mainly on the 'new pluralism' of the Web (Rogers & Marres, 2000). Notwithstanding, the opposite approach is also possible. In line with that stated in the last section, I want to emphasise here the other side of the coin: that of fragmentation. With this aim, I propose to present as a problem a common metaphor of the Internet: the notion of 'forum'.

The idea of a public forum is frequently invoked by scholars when describing the egalitarian character of the Internet. It seems to render a suitable metaphor because forums and similar public settings resemble places where *equal* citizens interact and make decisions. Still, they are also good examples of social inequalities, because only those considered full citizens in a given society have a right to be there. For example, the Roman forum was a gendered place from which women were usually excluded (Connors, 1997). Another example could be that of people condemned to *atimia* (disenfranchisement) who were not allowed to enter the Athenian Agora (Forsdyke, 2005). Something similar happens with contemporary 'forums'. According to Barnes et al. (2003) although 'deliberative forums' are frequently intended to be inclusive, this ideal do not necessarily match the practices deployed in such forums nor the processes of dialogue within them.

Dynamics of exclusion are also present in virtual forums, where people without minimal technical infrastructure and communicative competences have no access (Katz & Rice, 2002), and where virtual communities are far from being open and tolerant environments (see, Gurak, 1997). Furthermore, on the Web not all voices have the same weight. Although, in theory, 'everyone' can participate on the Net, not all the content which is published there has the same level of social acceptance and credibility (Rogers, 2002).

The INA allows light to be shed on some of these inequalities. For example, showing how NGOs are not taken into account by public authorities while the latter are co-opting the former's alternative discourses. However, there is another much more important point to highlight, namely, that INA also contributes to re-produce inequalities on the Net and, eventually, in the political arena in cases where INA's outcomes are used in decision and policy-making. This happens because the method configures a map by including only the *main* organisations responsible for making the NWC visible on the Web. INA does so following a number of criteria, as well as the rationale of the software Rogers and Marres employ in their Internet studies: the Issue Crawler.

According to Rogers (2002), the Issue Crawler takes advantage of the 'link economy', a strategy that webmasters currently deploy in order to increase the visibility of their websites. The link economy operates as citation in science. The difference lies in that it is based on hyperlinks exchanges: the more hyperlinks a webpage receives, the more renowned and reliable it becomes. Popular search engines

such as Google function according to such an idea. Bach and Stark (2004) describe how it happens:

'... consider the popular search engine Google: when it suggests sites to match your query it is also performing a search and establishing a link. To prioritize your answer it considers all the other sites that have linked to the potentially relevant sites that match your query and ranks them, based on patterns of links (i.e., the site with the highest number of links to it is considered more relevant).

In other words it searches based on the pattern of links' (p. 109).

In the same way, Issue Crawler reveals 'key nodes' by harvesting and counting the amount of in-links and out-links of the samples of websites. The INA relies on the same 'economy' too, although the process of harvesting and counting of links is realised manually in order to control the nodes of the issue network to fulfil a number of criteria. These criteria are of different kind. The first two allow the analysts to delimit the object of the study. They are: (1) the existence of a common reference to NWC in the contents of the nodes, and (2) the geographical delimitation of the nodes in Spain. A third criterion allows the researchers to understand better if the identified players occupy a key position on the Web in the majority of the five waves of samples carried out.

Although these criteria are methodological choices, they do not simply organise research and help researchers to obtain reliable information. They also constitute the 'forum' that the INA pretends to depict. Firstly, it limits the participants to those players who are actually speaking about the NWC. Those actors who do not share a consistent or permanent concern with sustainable water management are excluded (e.g., it is

striking that any private sector player may enter the 'forum'). Secondly, the same happens to those players who are placed outside Spain. Although water policy and management are highly influenced by different outsiders (e.g., the European Parliament and the Council of the European Union), they are not regarded as relevant players for the purposes of the study.

The three criteria mentioned above (the explicit mention of NWC, geographic delimitation, and persistence/recurrence) already define the 'relevant' participants in the virtual 'forum'. Nonetheless, they are not explicitly concerned with legitimacy. On the contrary, the so-called authority threshold is a criterion which is much more focused on the issue. The authority threshold is a simple centrality measure frequently employed in Social Network Analysis (see, Bonacich, 1987; Freeman, 1978) and it is clearly related to the 'link economy'. In each iteration carried out during the snowballing sampling, this criterion allows the analysts to select promising 'candidates' among more than one thousand websites. Accumulating links, some of these candidates gain prominence during the process of sampling, becoming 'central' nodes and/or 'popular' players.

At first glance, the prioritisation developed with the measurement of the authority threshold seems to be a neutral, quantitative procedure. Even so, it is not completely innocent, taking into account its consequences. The INA reveals those players who possess 'link authority' (Rogers, 2002). But, at the same time, it contributes to the production of this very authority. The procedure attributes a prominent position to certain players on the Web, and justifies their inclusion into a particular form of public: the issue network. It does so with a scientific-like method.

Yet, the INA is not so far away from the practices through which ordinary people recognise and select 'appropriate' players for public participation.

While carrying out the INA, a number of categories are also deployed, and particularly those of 'governmental' and 'non-governmental' become useful tools for the description of the final list or 'key nodes'. These categories resonate with the pair 'profit-seekers'/'non-profit seekers'. Additionally, the use of the 'expertness' principle is noticeable. The possession of relevant knowledge (in the form of NWC claims) is essential to include an actor in the list of candidates. The application of such symbolic tools has the effect of choosing, between a large number of possible organisations, those who are authoritative players in the NWC and may be viewed as appropriate representatives of a discourse on sustainability. The outcome is the constitution of a reduced but legitimised public.

The INA is another way to put the RLP into action and similarly to the Political Geography of Common Sense, has practical consequences. To follow and count links means not only taking advantage of the link economy. It is also a way of exerting a moral politics of links. It resembles the classical sociometry in which those people who receive more choices from the others become the 'stars' (see, Moreno, Jennings, & Stockton, 1943). It is also coherent in the context of how representative democracy works: those who accumulate the biggest amount of votes are the winners and obtain access to positions of power. In each of these cases (the link economy, sociometrical studies or representative democracy) the outcome is the emergence of a recognisable, authoritative and influential elite. Thereby, Rogers and Marres (2000) speaks about issue networks on the Web as a set of 'reputable spaces'.

Thus, what is originally considered in Section 3.1. as a method to include a plurality of voices in a 'map of stakeholders' (Ledoux, Beaumont, Cave, & Turner, 2005), can also be interpreted as the way to constitute a sort of aristocratic public. Once again, it is striking that the way people constitute publics suitable for public participation is not precisely democratic in its effects. By contrast...

The RLP, as it is mobilised in conjunction with other symbolic resources, fragments the publics and delegates authority to a limited number of players.

In the broken political stage of inequalities that the INA produces, some players are not taken into consideration because of their status of non-concerned or outsiders parties. Other actors lose legitimacy because of their lack of relational capital (according to the 'link economy'). Moreover, a reduced number of voices are exalted because of their 'link authority'. These are the spokespersons who are finally included in the small group of reputable voices. In the case of INA, if the accent of the analysis is posed on these effects of fragmentation and in the elite-formation, then it is difficult to uphold the ideal of the Internet, *per se*, as an egalitarian and 'democratic' setting. If this striking conclusion is added to the effects of the mobilisation of the RLP in talk, questions about the 'democratic' character of discourses and practices of public participation may raise. In the next section – before the main outcomes of the dissertation are summarised – some of these questions are posed and further lines of enquiry are proposed.

4.5. Concluding remarks

The previous pages contribute to the study of the implicit and explicit rules organising 'deliberative forums' (Barnes et al., 2003), and the processes of categorisation (Neveu,

2011) and framing of publics (Wickson et al., 2010). The study presented here is focused on some practical methods through which the notion of legitimate members of a public is constructed and mobilized by ordinary people and social analysts. I have coined the term 'Regimes of Legitimate Participation' in order to give a name to one of these methods. The RLP are a set of principles governing the identification, prioritisation and election of the players entitled to assume the part of the 'public' in public participation.

The notion of RLP is used here as a reading key with which a concern present in Sections 2.1., 2.2. and 3.1. becomes apparent. In that sense, let me summarize the main outcomes of these sections and how they are related with the idea of RLP. Section 2.1. presents a list of 'ideal types' of participants in water debates in Spain. They are the 'experts', 'affected' people, 'beneficiaries', 'profit-seekers' and 'aware' people. This is a set of players that, according to the conclusions of Section 2.1., emerge as a result of a categorisation process based on pairs such as 'beneficiary'-'affected' or 'aware'-'unaware'. These pairs are interpreted there as traces of identity processes involved in the public understanding of water controversies (an identity-work with a striking territorial component). In Chapter 4 they are regarded as the expression of dichotomous axis of value (those of 'expertise', 'affectedness', 'awareness' and 'unselfishness') configuring the very core of the RLP. Each of these axis of value can be used independently or juxtaposed in talk in order to distribute legitimate and illegitimate roles between the actors summoned to the political stage.

Section 2.2. offers an interpretation of the data from the point of view of Discursive Social Psychology and points to a Political Geography of Common Sense

employed by speakers during the focus groups. The analysis indicates that people mobilise the spatial categories included in such folk political geography in order to achieve different discursive actions. According to the section's conclusions, one of these actions is the comprehension of 'water problems' through the identification of populations which are 'relevant' in such 'problems'. By doing so, speakers not only make recognisable an issue but also constitute the topic in a certain manner (e.g. producing 'water problems' as scenarios of dispute between groups).

From Section 2.2. comes the idea of RLP as a form of practical knowledge, a toolkit people use in order to produce noticeable effects. Because of that, I argue that the audiences do not simply describe publics, but perform and constitute them. The same section suggests that, in the communicative situations in which the constitution of a public is achieved by ordinary people, the RLP does not necessarily operate in isolation, but in connection to well-known forms of talk. Furthermore, as the review of Section 3.1. suggests, the RLP can also appear as a part of the methods social scientists employ in the study of publics and, especially, in the evaluation of their members.

Section 3.1. deploys a particular understanding of the public of water issues in Spain. It draws on the notion of 'issue network'. The analysis of such a policy network shows that sustainability discourses are no longer a critical approach to water policy, but a main frame in water debates. Concretely, the 'New Water Culture' abounds in the content produced by two discrete but asymmetrically connected 'political communities'. The first one includes the governmental websites. The second is

integrated by non-governmental nodes. Each community has its own role in the articulation and diffusion of water issues.

In the conclusions of Section 3.1. the Issue Network Analysis is viewed as a conceptual and methodological tool offering a panoramic view of the plurality of voices involved in water policy and sustainable environmental management. Chapter 4 offers an alternative approach to the same method and regards it as another example of RLP in action. In that sense, I argue that INA does not only allow researchers to trace and describe an authoritative public, but also allows them to constitute this very public. The production of the issue network comes with the use of certain criteria and, particularly, taking advantage of a 'link economy'. With these tools, a plural, but also fragmented, public is artfully constructed by the researchers.

The different sections of this dissertation depict the structural properties of RLP and its basic operation, as well as how it works in conjunction with other symbolic resources and scientific methods. Although the mobilisation of RLP – as it is examined in here – is discursive in nature, or is a part of an academic exercise, it can also be regarded as a productive 'art of staging'. As may be expected, RLP constitutes a list of legitimate and illegitimate members of a public. A couple of expressions of these effects are highlighted in this dissertation: they are the exclusion of illegitimate players and the formation of an authoritative elite configured by the legitimate participants. In that sense, I want to close this study by highlighting the following insight:

The mobilisation of RLP in ordinary talk and social research produces striking social consequences, such as exclusion and elite-formation, posing questions about the 'democratic' character of public participation.

Some scholars proclaim that the democratisation of democracy means '*the people's* control of their destiny' (Callon et al., 2009:11), and sustain that the constitution of 'open spaces' such as deliberative, dialogic and hybrid forums where '*everyone* contributes information and knowledge that enrich the discussion' (p. 9) is essential for a renewal of democracy to be achieved. However, it is not always clear if 'the people' and 'everyone' can be considered as the inclusive and 'democratic' categories they appear. In fact, debates about the most suitable players who can be considered as part of the 'wider public' abound (Barnes et al., 2003; Neveu, 2011). Throughout those debates, 'the political question par excellence' (Stengers, 2005:995) emerges: 'Who can talk of what, be the spokesperson, represent what?', and - as a reply - 'the people' or the 'wider public' gives way to more specific categories.

The consequent fragmentation of publics is the outcome of small operations of evaluation, forms of ordinary political judgement which define certain players and not others as relevant, appropriate or worthy participants in the articulation of public affairs. By taking into consideration these effects of RLP one may wonder: if public participation does not include 'everyone', could such participation to be considered as a form of enriched democracy in practice? Is it correct to say that it 'democratises' techno-scientific controversies? Does it 'democratise' anything? In fact, what does 'democratisation' really mean? These unresolved questions claim a close and critical

approach to how far public participation contributes to social inclusion and democratic renewal. As some authors have already stated, while public participation is usually presented as a solution, it does not clearly answer the problem of how to democratise science and technology (Jasanoff, 2003) and, in fact, can be considered as a problem in itself (Delgado et al., 2010).

There are a number of scholars and social groups currently working on articulating dissatisfaction with the role of public participation in the 'democratisation of science and technology' (see, Bogner, 2012; Braun & Schultz, 2010; Lyons & Whelan, 2010). In a similar vein, this PhD dissertation suggests that the widespread optimism still present in many works on the issue in STS literature should be tempered, and additional empirical research on players' exclusion and elite-formation is advisable. In that sense, this study may be viewed as an early step in the research into how the understanding and making of public participation is governed through different forms of practical knowledge. Further analyses are needed in order to develop the notion of RLP, and to clarify its role in the 'democratisation of science and technology'. Taking into consideration that different processes of dialogue and discussion operate according to different rules and logics (Barnes, 2002; Wickson et al., 2010), alternative data sources are required to be analysed.

To that effect, one line of enquiry is considering how RLP are involved in the discourses and practices of other audiences different from those considered here. By examining what the mass-media, official documents and critical voices express about public participation other sides of RLP can be depicted. For example, some principles

not considered in previous pages, as well as unexpected consequences of RLP in action should become apparent. Of particular interest may be to study how different actors produce alternative axis of value, but also how they contest the regimes mobilised by other groups.

A rather different line of enquiry concerns publics engaged in current controversies and ongoing (invited and uninvited) forms of public participation. This PhD dissertation is based on what people say about an already closed controversy, and on how researchers address a discourse on sustainability in such past debate. Thus, it is important to analyse controversies, participatory mechanisms and social mobilisations already under way, and how its publics and audiences perform the 'art of staging' in real time.

In relation with the above-mentioned lines of enquiry there are a number of challenges that must be confronted. Some of them are the following:

- Do different players deploy a variety of RLP during a controversy? Do a significant number of parties share a limited number of axis of value during an specific 'deliberative forum'? What is the role of divergent/convergent forms of RLP in the articulation of disagreement and consensus formation?
- Does RLP remain unchanged along the different stages of a given controversy? Are new axis of value produced and mobilised through the development of debates? How do stability or transformation of the RLP influence and are influenced by the ongoing events people face before, during and after the dispute?

■ Does the use of RLP have a role in the mobilisation or demobilisation of potential members of a public? Facing claims based on RLP – e.g. by participatory mechanisms sponsors and others –, how those parties summoned and/or excluded react?

By seeking answers to questions such as these, the notion of RLP can be empirically tested and a more comprehensive view of their structural properties, their dynamic operation and social effects will be reached. Further elaboration of the idea of RLP is expected to offer a better understanding of how people perceive, value and practise public participation. Additionally, it will offer a critical tool by shedding light on unexamined dimensions of public formation and on the reasons why public participation is considered important (or is beginning to be perceived as unsatisfactory) in the 'democratisation of science and technology'.

4.6. References

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Appendix

Abbreviations

ANT	Actor Network Theory
EU	European Union
GESCIT	Research Group for Social Studies in Science and Technology
ICT	Information and Communication Technologies
INA	Issue Network Analysis
NHP	National Hydrological Plan
NGO	Non-Governmental Organisation
NWC	New Water Culture
R+D+i	Research, Development and Innovation
RLP	Regimes of Legitimate Participation
STS	Science and Technology Studies



During a controversy, inventories of problems and solutions, but also of actors, are accomplished. The entities to be taken into account as part of the inventory of people and groups concerned are not invoked randomly. The disputing parties identify and select worthy members using single and simple legitimating principles. Thus, not everyone is eligible as a competent participant in the process of addressing and closing public techno-scientific debates. Only some of them are relevant candidates: those who fulfil certain conditions. Democratic representation or statistical representativeness can be regarded as the most frequently required conditions, but others can also be conceivable. This dissertation examines such foundations of legitimacy.

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